

# 2-3 Day Weather Forecast

Forecast Date: 05/24/2016

Valid Date: 05/25/2016 and beyond

Coastal VA and Land

Penn State Team

# SUMMARY

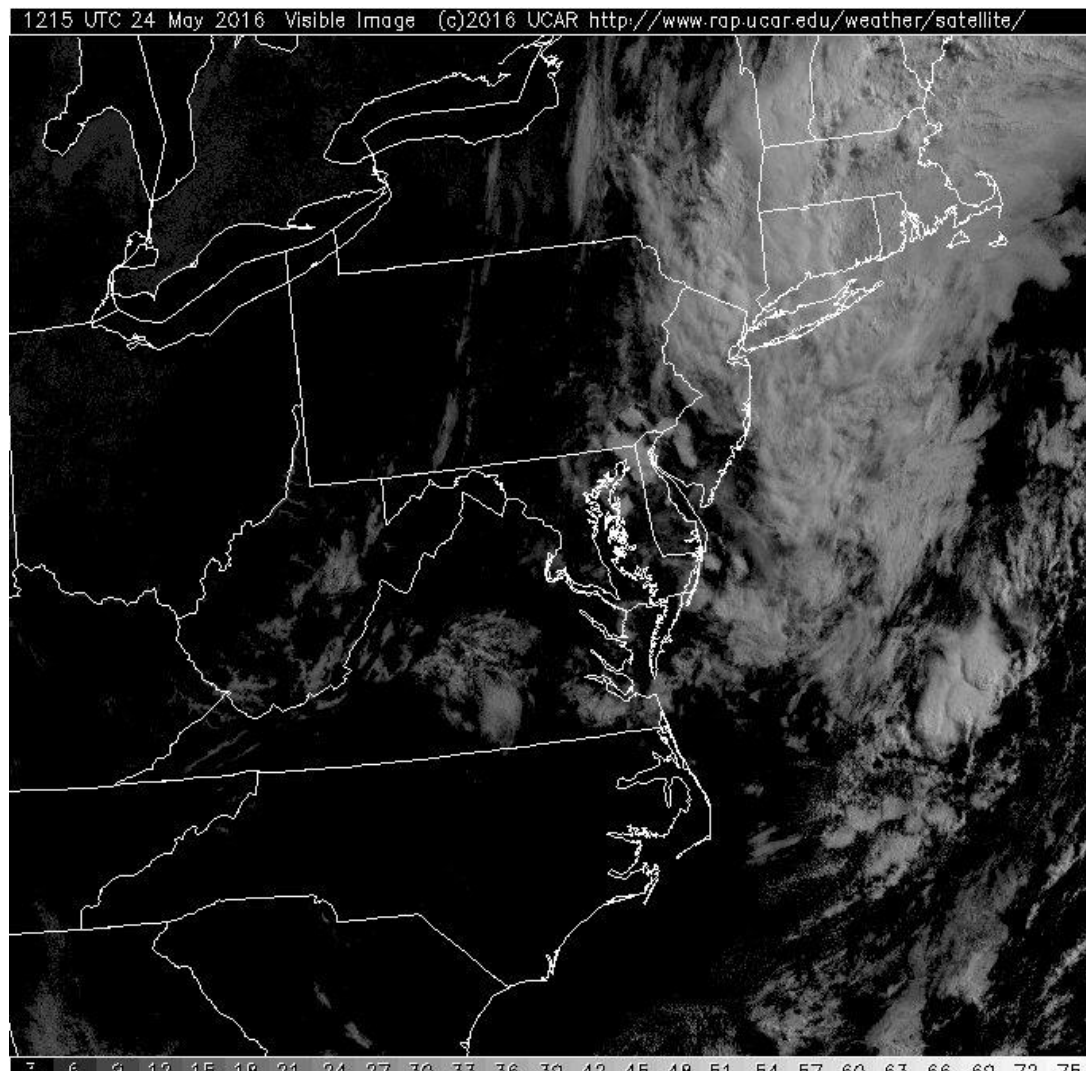
Discussion: Current Conditions, Short-Term Products, Long-Term Synoptic Outlook

TODAY:

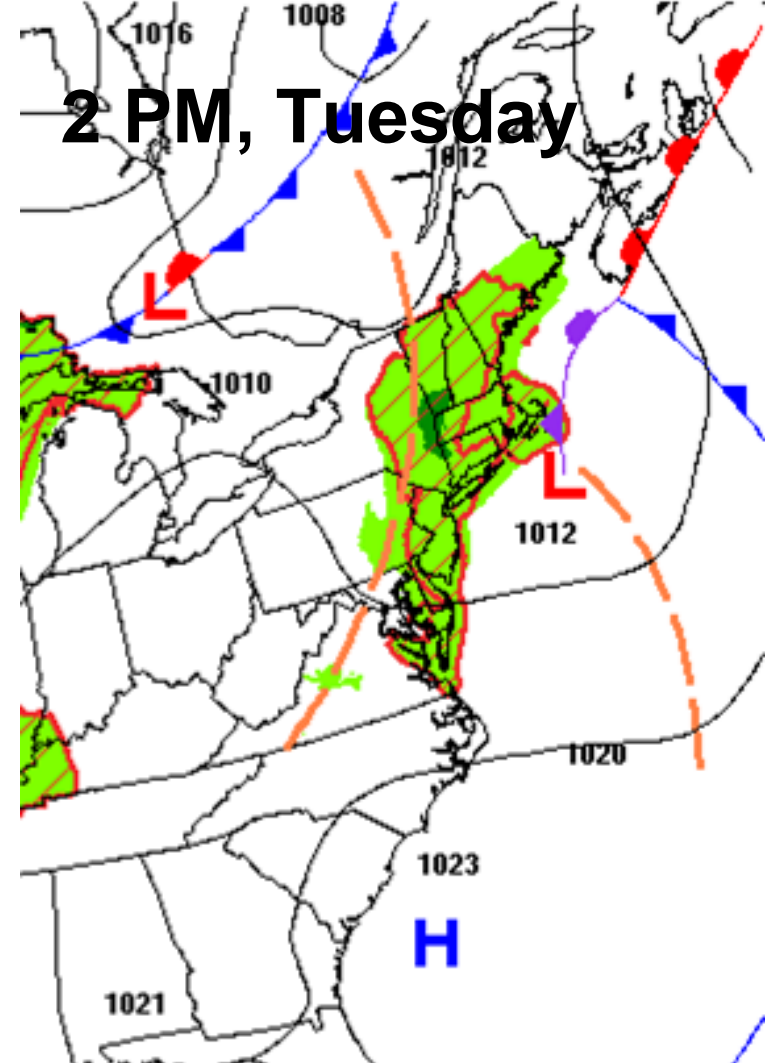
- Ocean: late morning maybe OK; maybe high clouds early aftn, convection late aftn / early eve, winds westerly for all levels
- Land: scattered aftn convection / TS, otherwise fine, winds westerly at low level and northwesterly at higher level

WEDNESDAY:

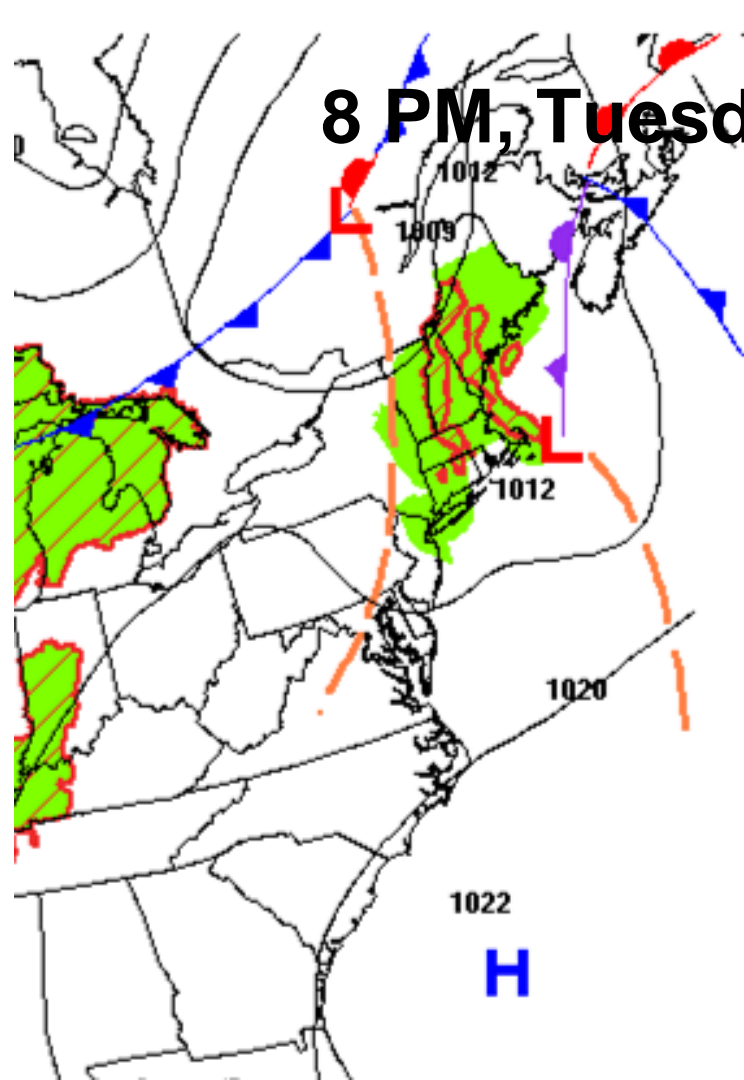
- Few clouds either ocean or land, except maybe cirrus after 1700 EDT. For ocean winds westerly at low levels and northwesterly at higher level. For land winds southwesterly at low levels and westerly at higher level.



**2 PM, Tuesday**

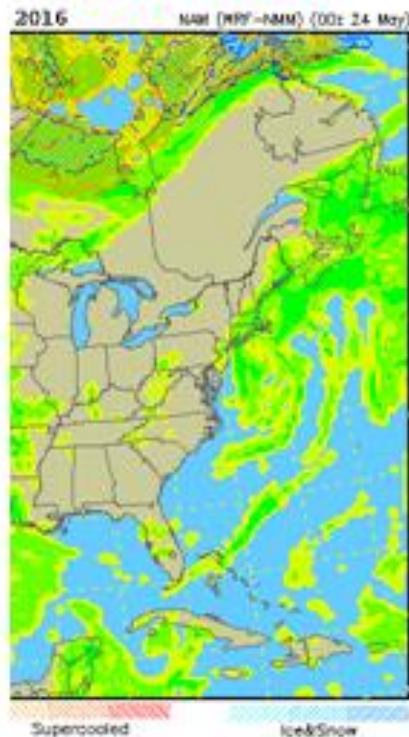


**8 PM, Tuesday**



## Integrated condensate, below 6000 ft – 00 UTC 24 May NAM

1200 UTC 24 May



1500 UTC 24 May



1800 UTC 24 May



2100 UTC 24 May



Tuesday May 24



## Integrated condensate, 6000 – 12000 ft – 00 UTC 24 May NAM

1200 UTC 24 May

1500 UTC 24 May

1800 UTC 24 May

2100 UTC 24 May



**Tuesday May 24**

## Integrated condensate, 12000 – 18000 ft – 00 UTC 24 May NAM

1200 UTC 24 May



1500 UTC 24 May



1800 UTC 24 May



2100 UTC 24 May

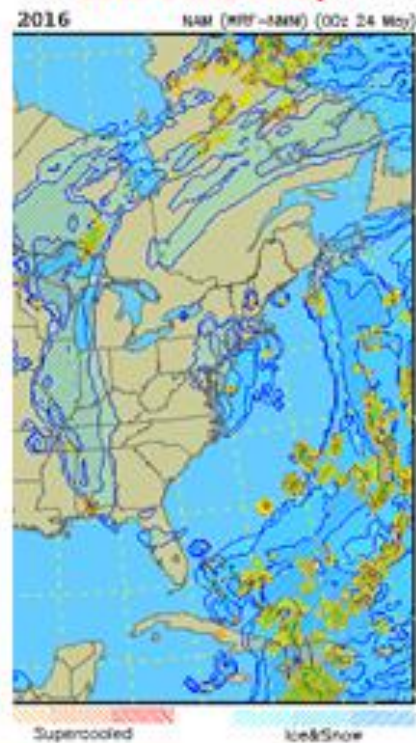


Tuesday May 24

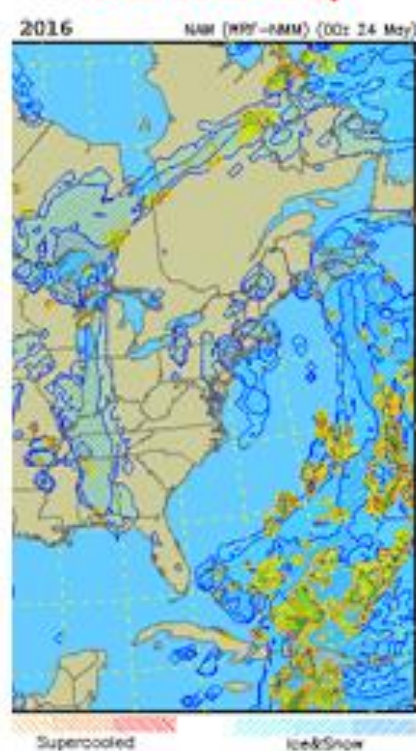


## Integrated condensate, above 18000 ft – 00 UTC 24 May NAM

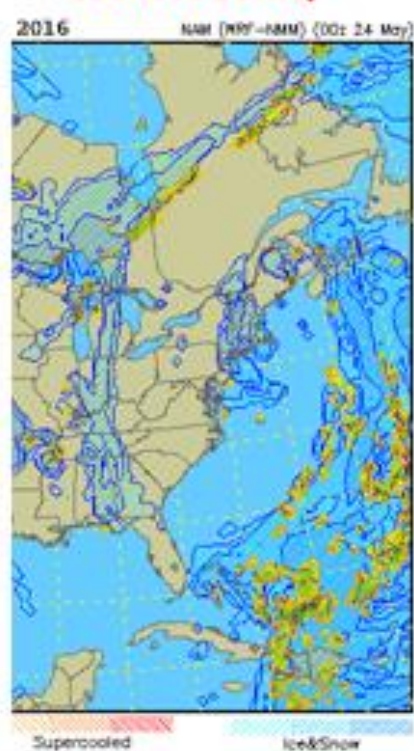
1200 UTC 24 May



1500 UTC 24 May



1800 UTC 24 May



2100 UTC 24 May



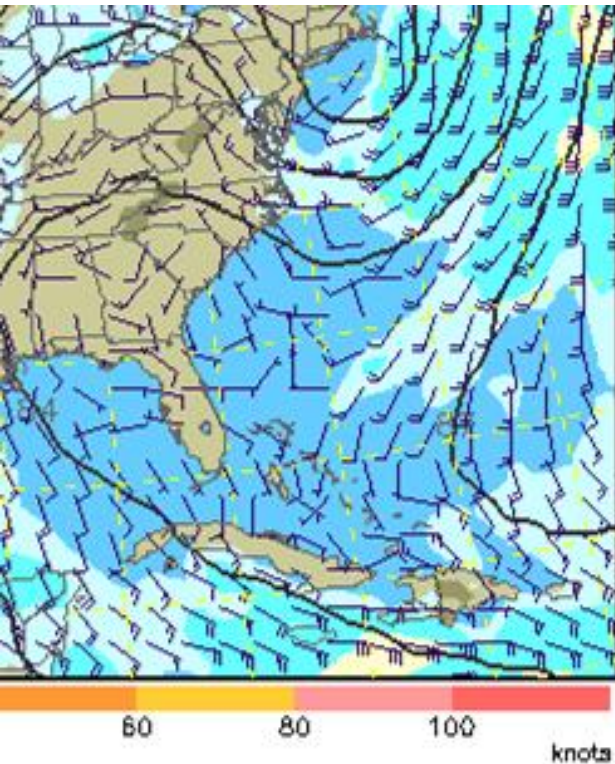
Tuesday May 24



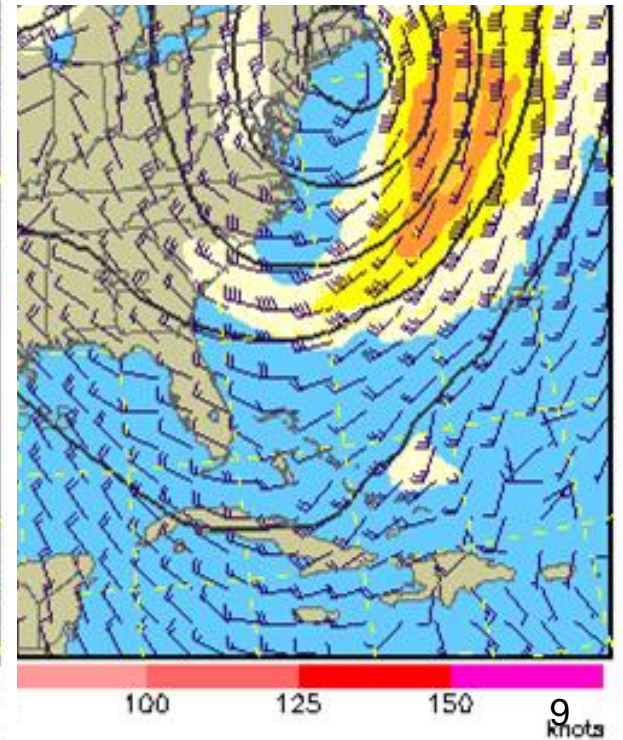
11 AM, Tuesday

# NAM Winds

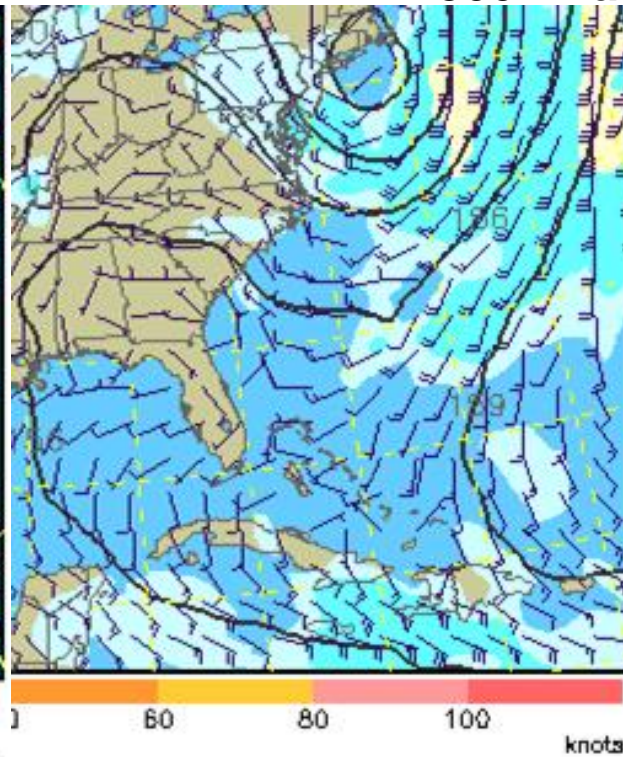
925 hPa



850 hPa



500 hPa





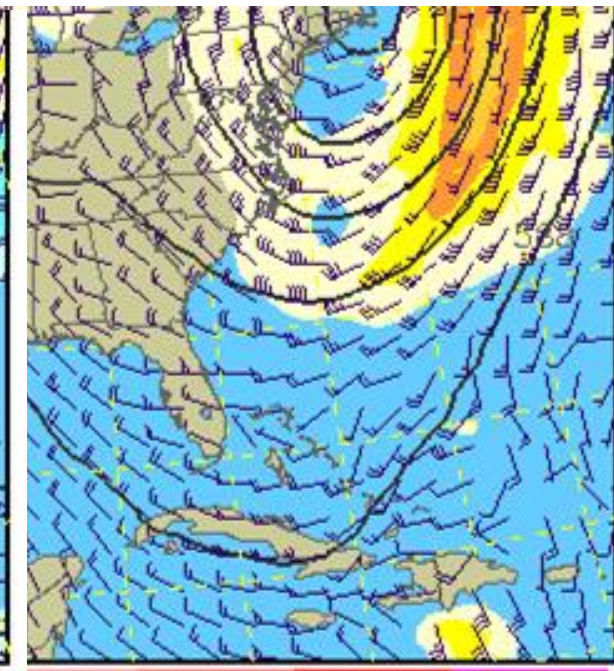
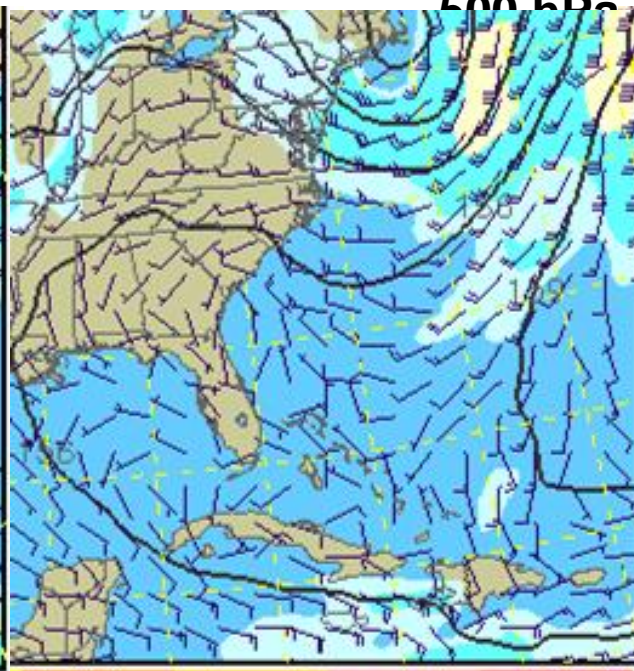
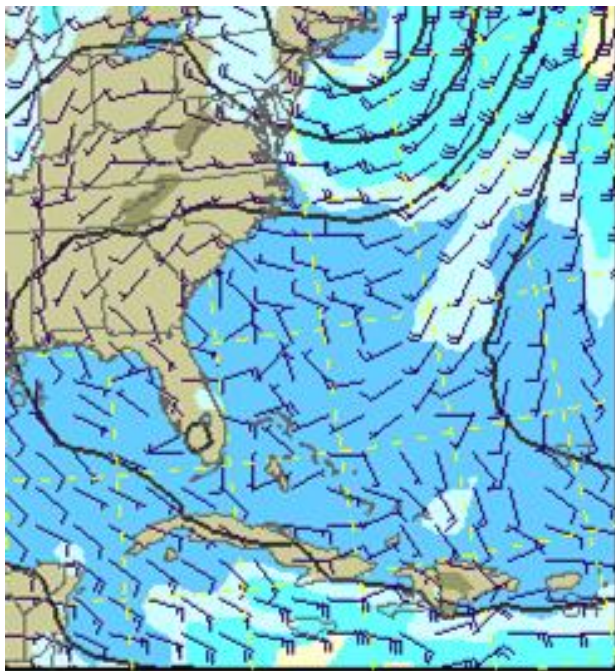
5 PM, Tuesday

# NAM Winds

925 hPa

850 hPa

500 hPa



60

80

100

knots

50

60

80

100

knots

100

125

150

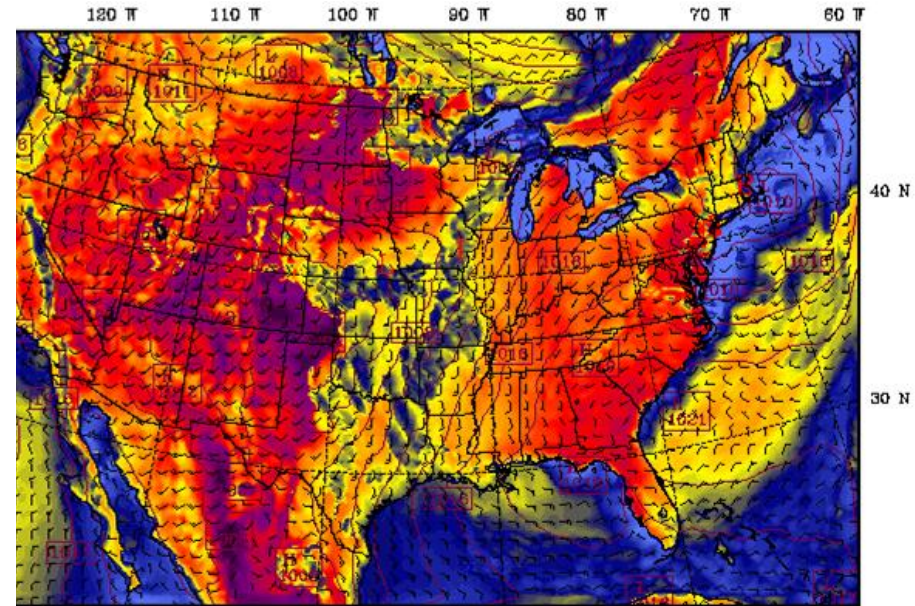
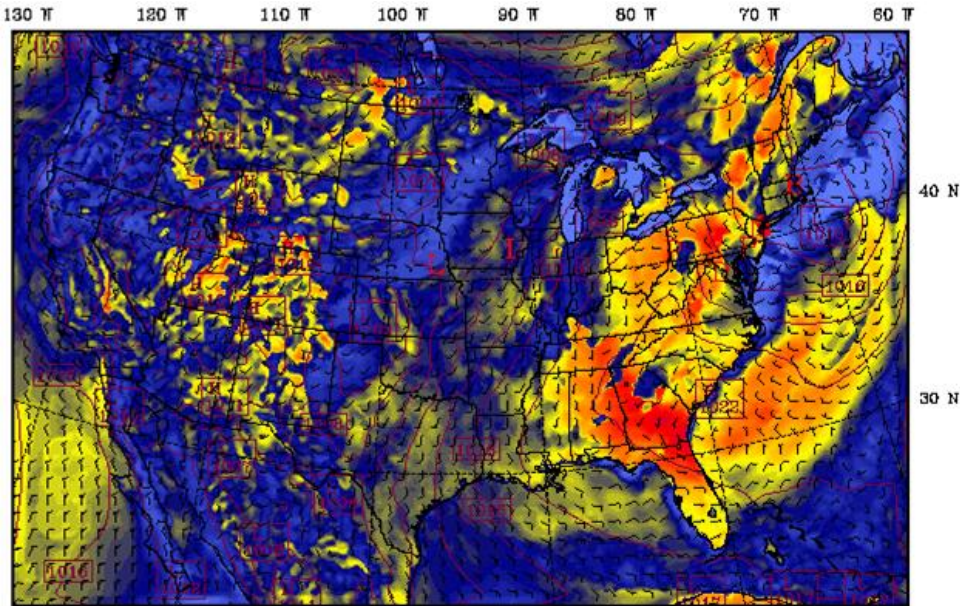
knots



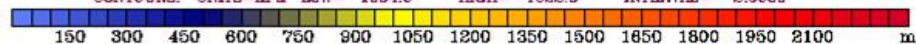
# WRF PBL Depth

11 AM, Tuesday

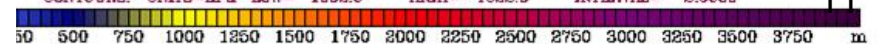
5 PM, Tuesday



BARB VECTORS: FULL BARB = 5 m s<sup>-1</sup>  
CONTOURS: UNITS=hPa LOW= 1004.0 HIGH= 1022.0 INTERVAL= 2.0000

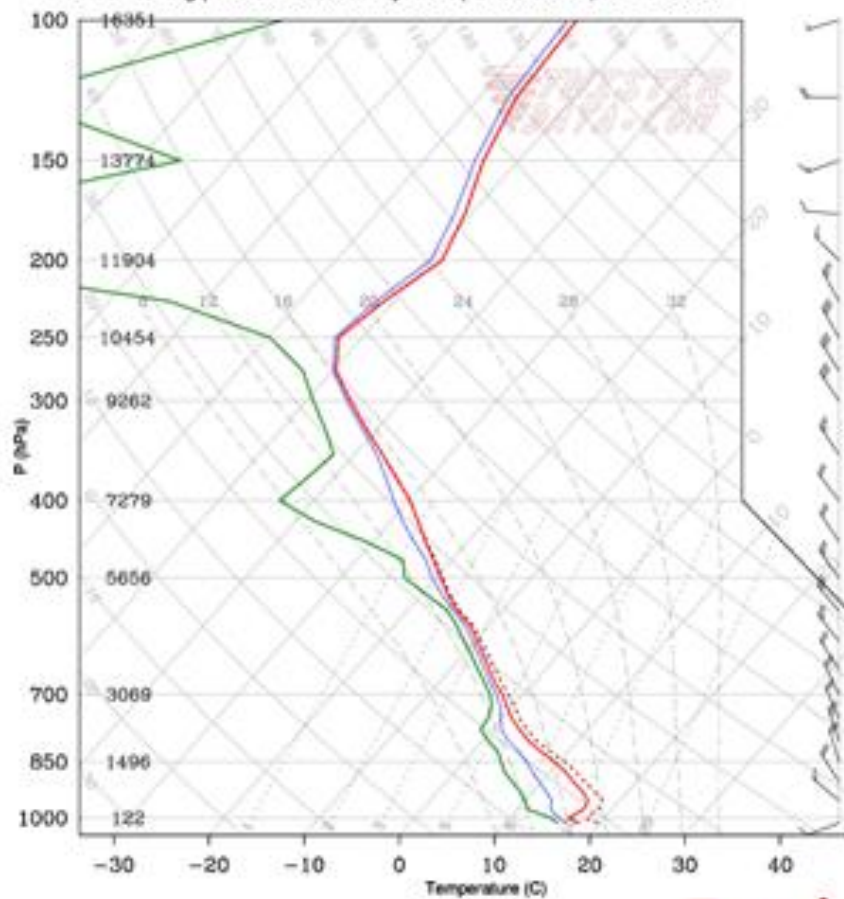


BARB VECTORS: FULL BARB = 5 m s<sup>-1</sup>  
CONTOURS: UNITS=hPa LOW= 1002.0 HIGH= 1022.0 INTERVAL= 2.0000

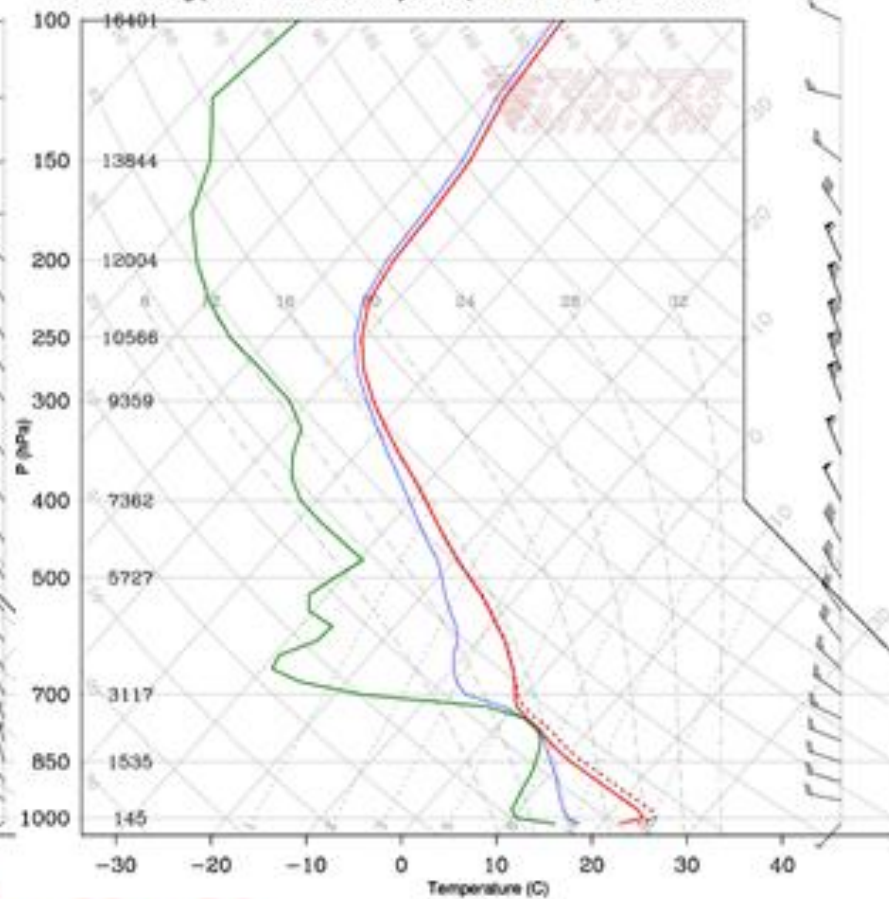




NAM Sounding | 12 UTC Tue 24 May 2016 | Lat 37.9732 | Lon -75.5264

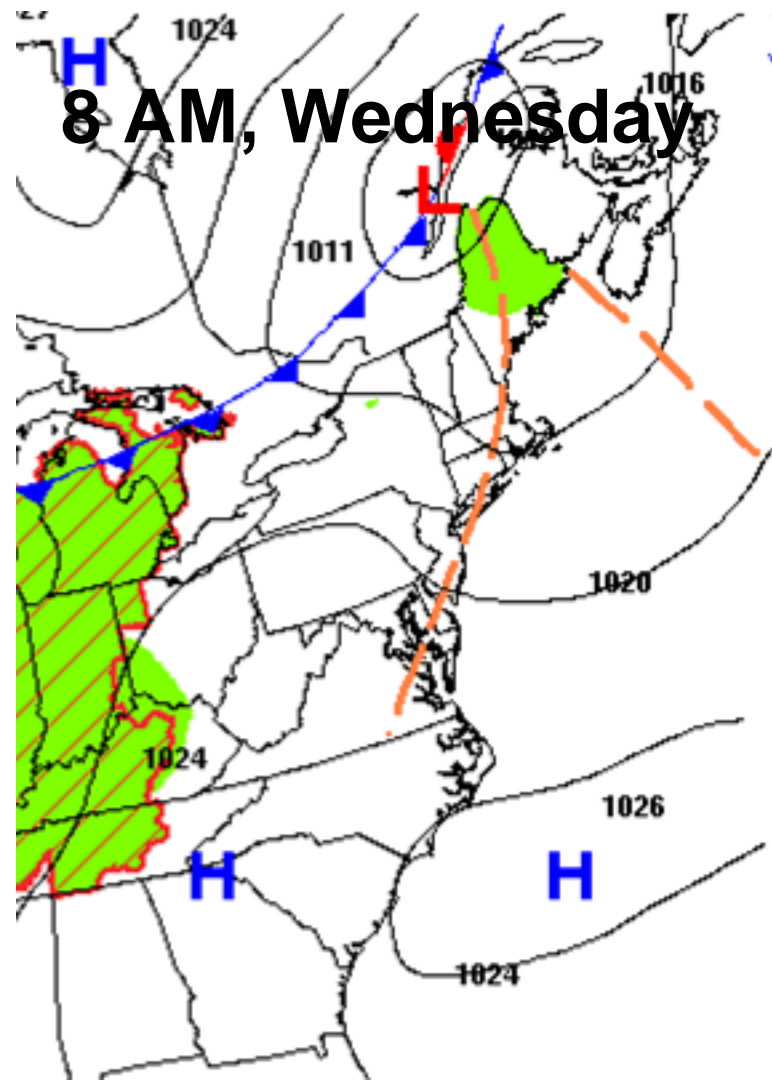


NAM Sounding | 00 UTC Wed 25 May 2016 | Lat 37.9732 | Lon -75.5264

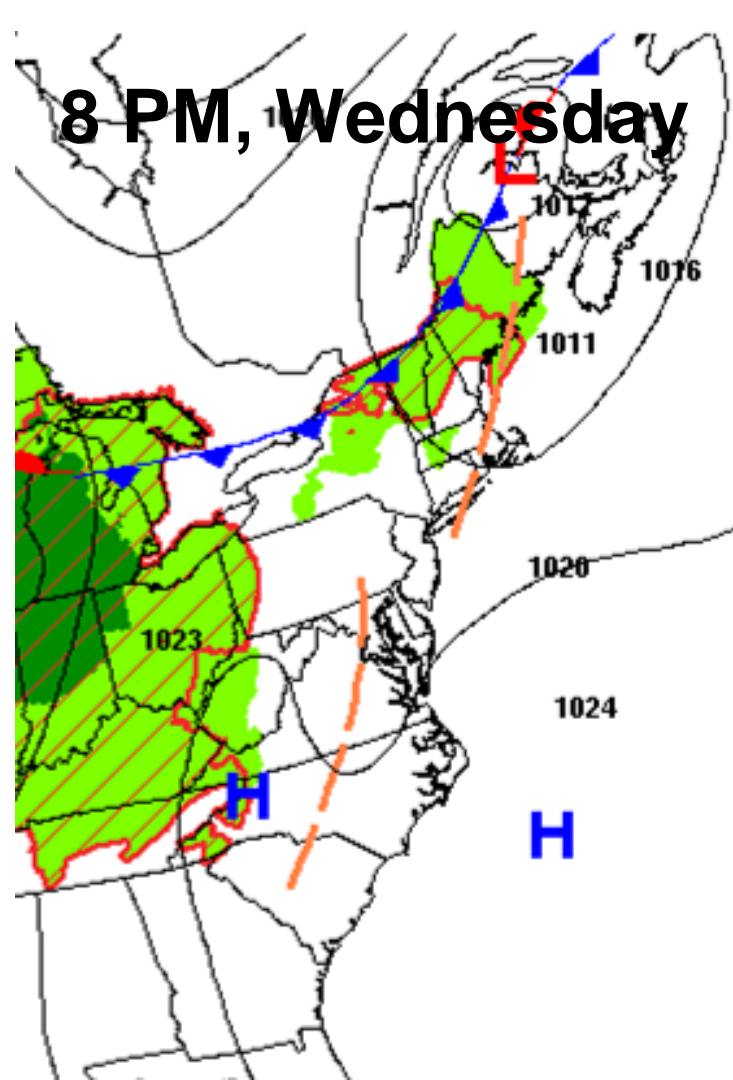


**Tuesday May 24**

**8 AM, Wednesday**



**8 PM, Wednesday**



## Integrated condensate, below 6000 ft – 00 UTC 24 May NAM

1200 UTC 25 May

1500 UTC 25 May

1800 UTC 25 May

2100 UTC 25 May



Wednesday May 25



## Integrated condensate, 6000 – 12000 ft – 00 UTC 24 May NAM

1200 UTC 25 May



1500 UTC 25 May



1800 UTC 25 May



2100 UTC 25 May



Wednesday May 25

## Integrated condensate, 12000 – 18000 ft – 00 UTC 24 May NAM

1200 UTC 25 May



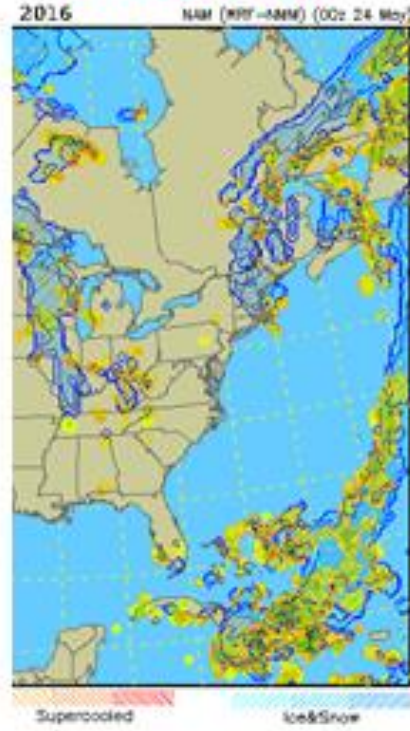
1500 UTC 25 May



1800 UTC 25 May



2100 UTC 25 May

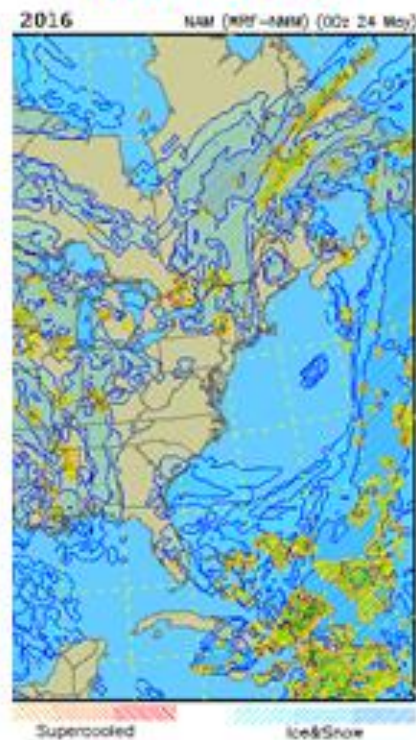


Wednesday May 25

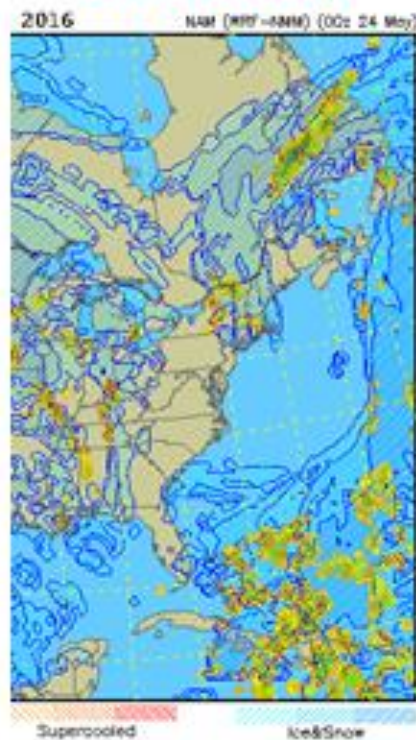


## Integrated condensate, above 18000 ft – 00 UTC 24 May NAM

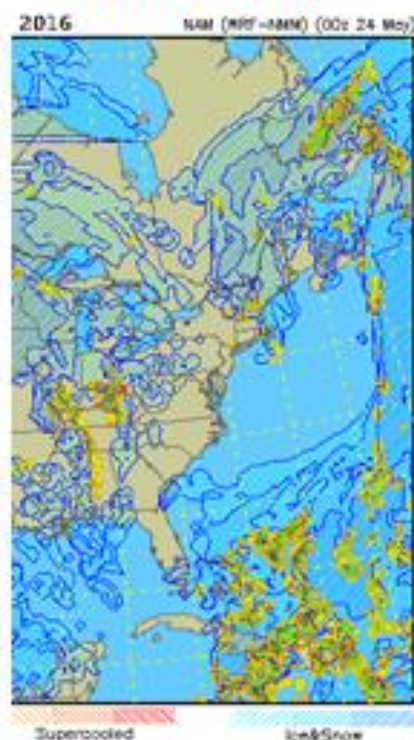
1200 UTC 25 May



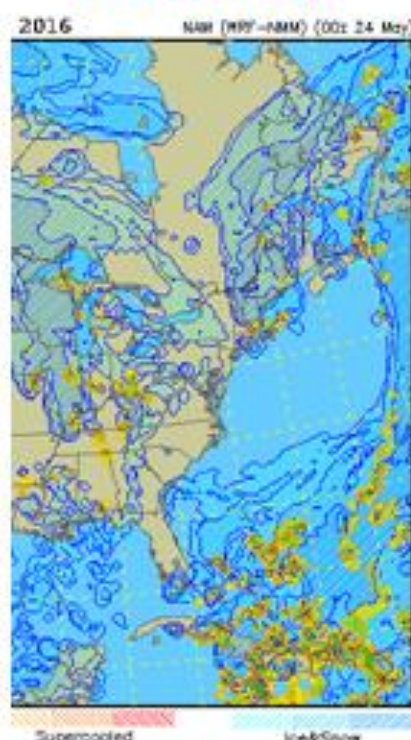
1500 UTC 25 May



1800 UTC 25 May



2100 UTC 25 May



Wednesday May 25



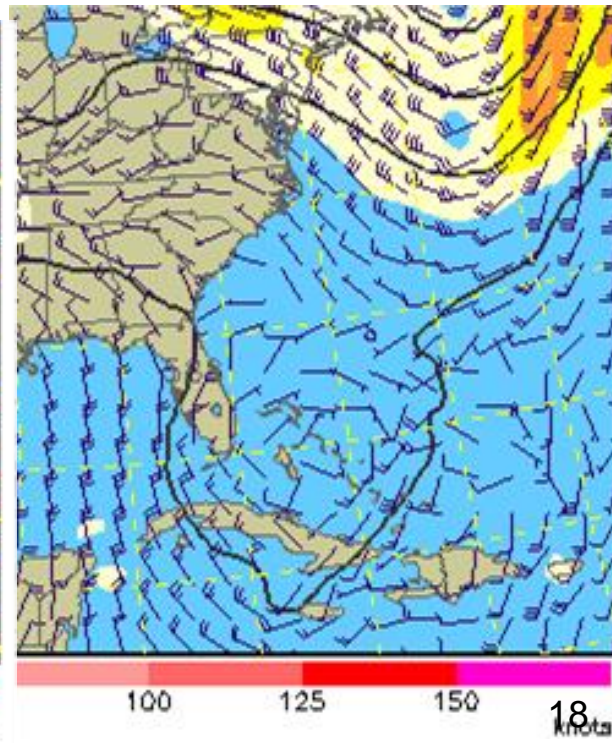
11 AM, Wednesday

# NAM Winds

925 hPa



850 hPa



500 hPa

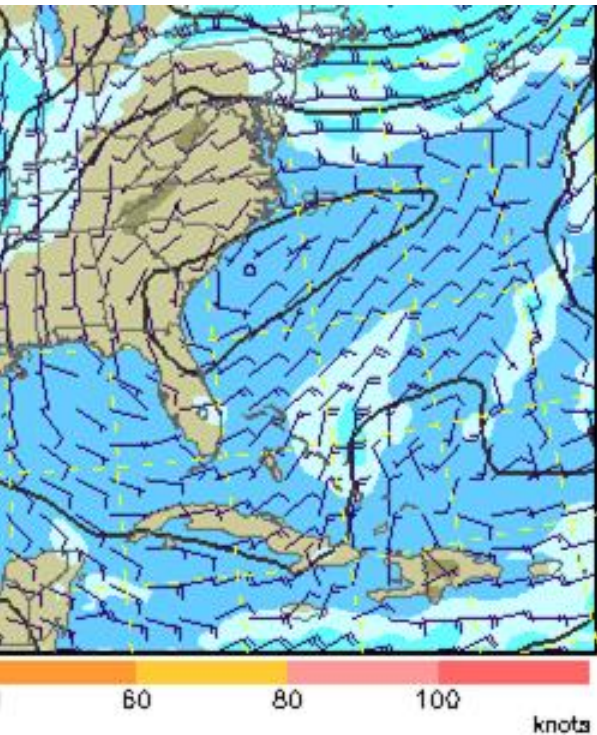




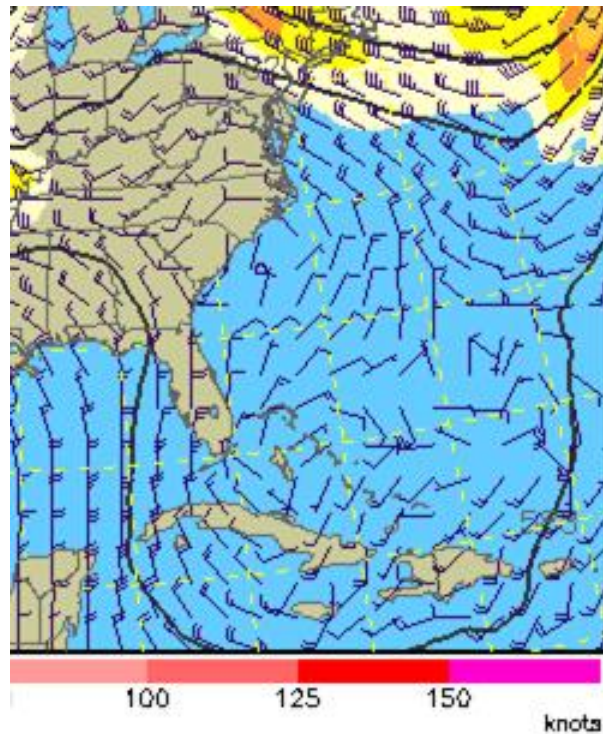
5 PM, Wednesday

# NAM Winds

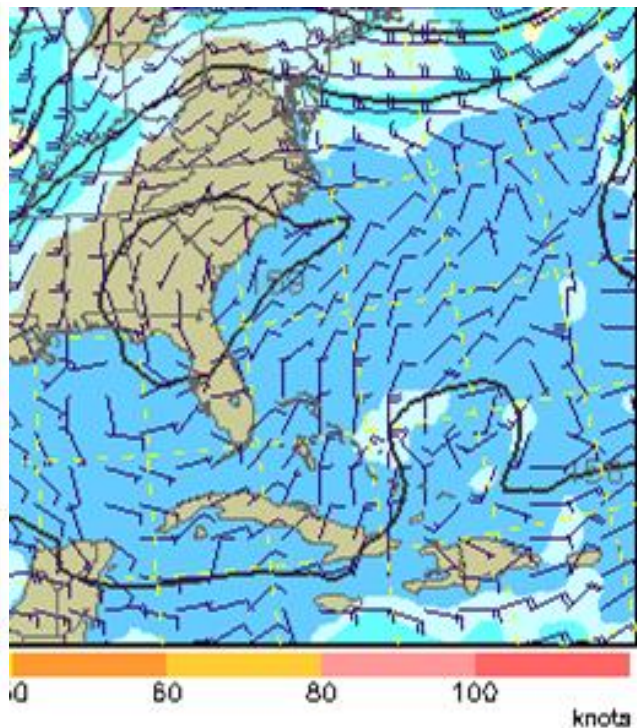
925 hPa



850 hPa



500 hPa

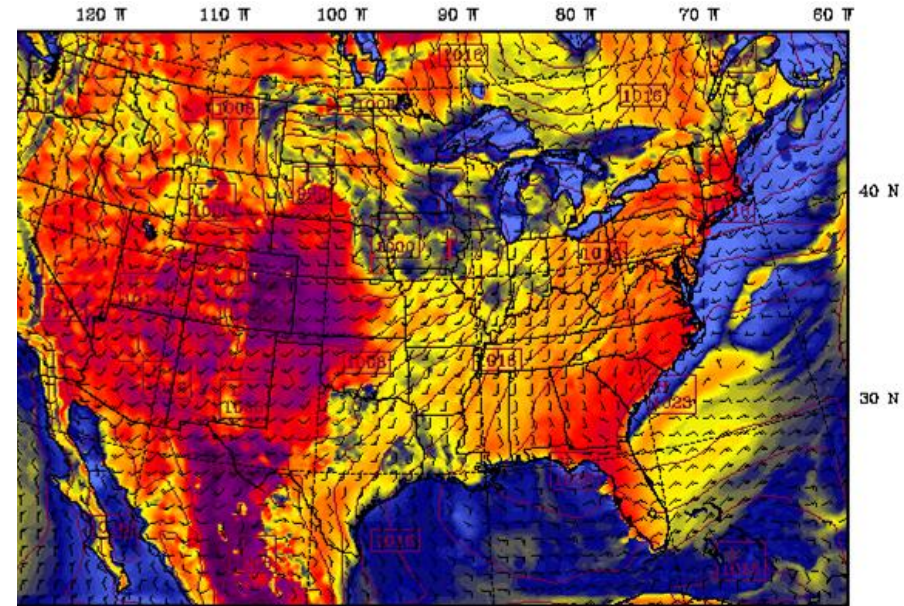
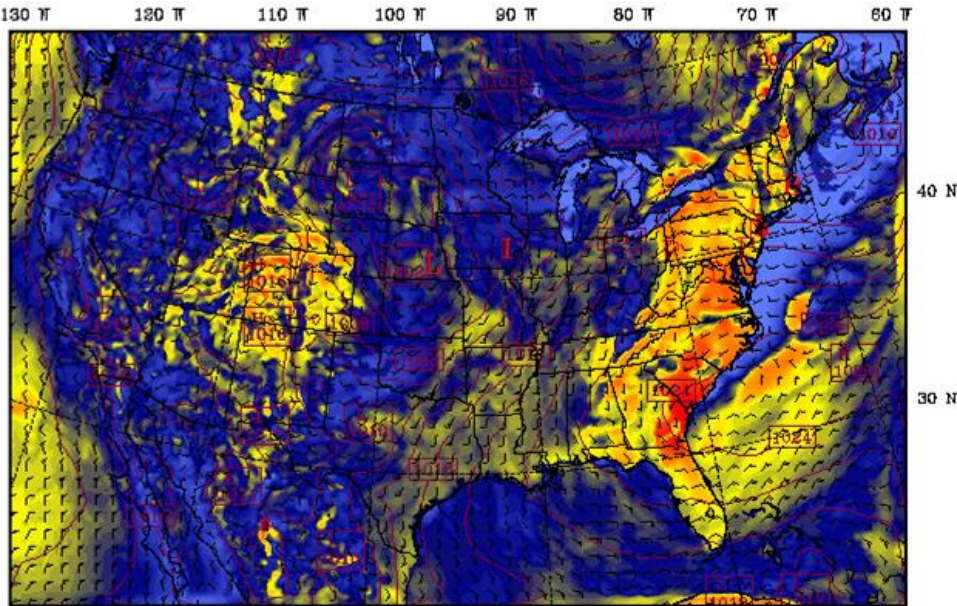




# WRF PBL Depth

11 AM, Wednesday

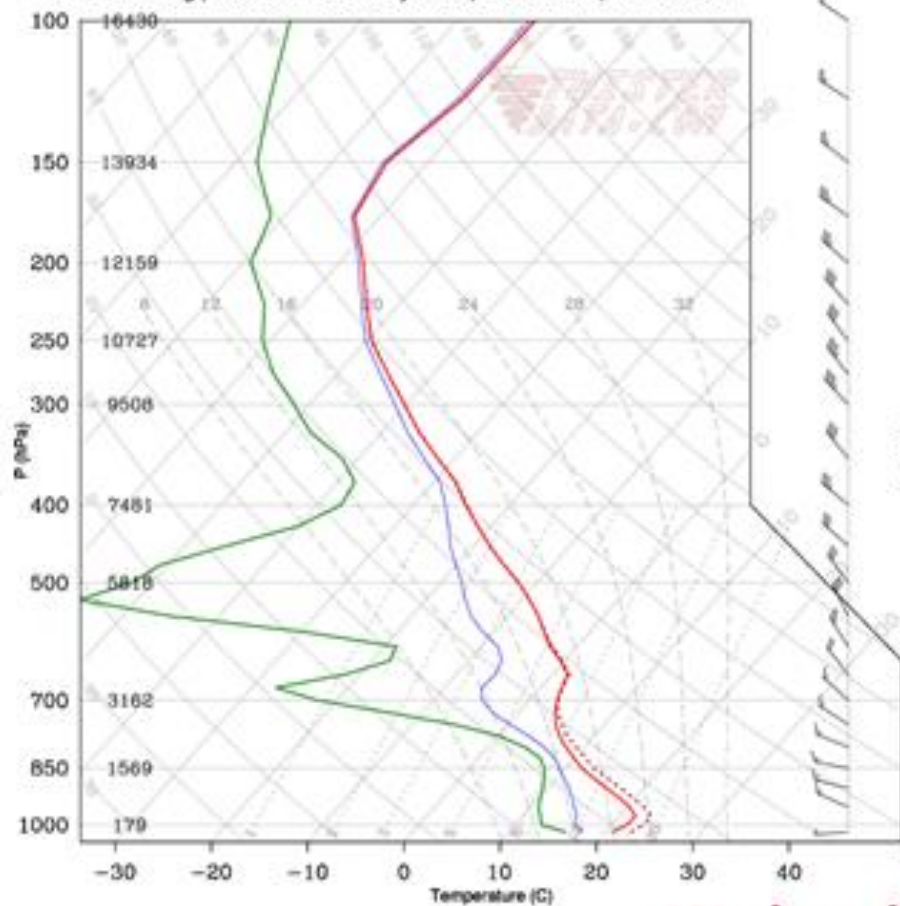
5 PM, Wednesday



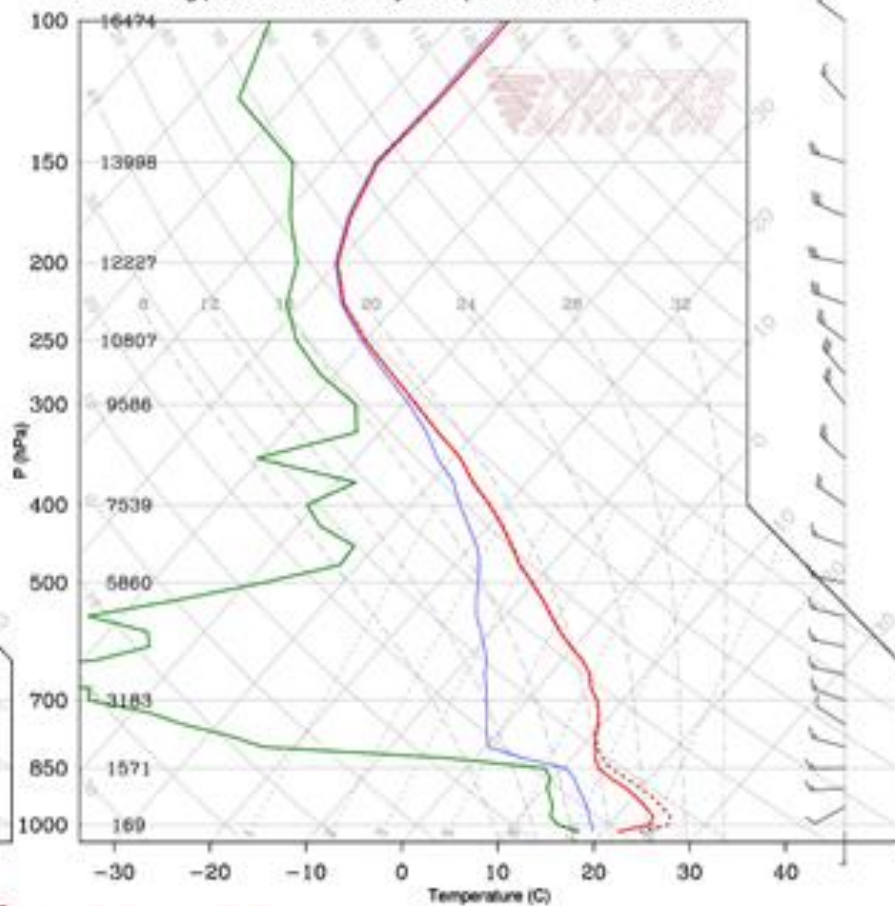
BARB VECTORS: FULL BARB =  $5 \text{ m s}^{-1}$   
CONTOURS: UNITS=hPa LOW= 1002.0 HIGH= 1028.0 INTERVAL= 2.0000

BARB VECTORS: FULL BARB =  $5 \text{ m s}^{-1}$   
CONTOURS: UNITS=hPa LOW= 1000.0 HIGH= 1028.0 INTERVAL= 2.0000

NAM Sounding | 12 UTC Wed 25 May 2016 | Lat 37.9732 | Lon -75.5264



NAM Sounding | 00 UTC Thu 26 May 2016 | Lat 37.9732 | Lon -75.5264



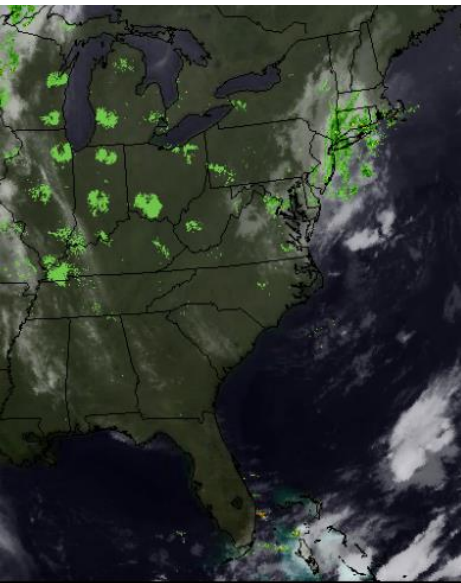
Wednesday May 25



**Present/Update Cloud Cover Condition and Precipitation System moving towards E/NE driven by prevailing synoptic westerly**

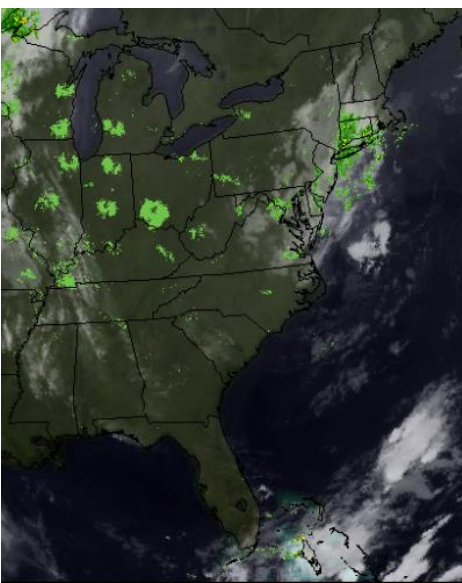
CONUS Satellite/Radar/Warning Composite: **GOES IR Satellite/NEXRAD Radar**  
<http://cimss.ssec.wisc.edu/geocat/>

09:00 Z



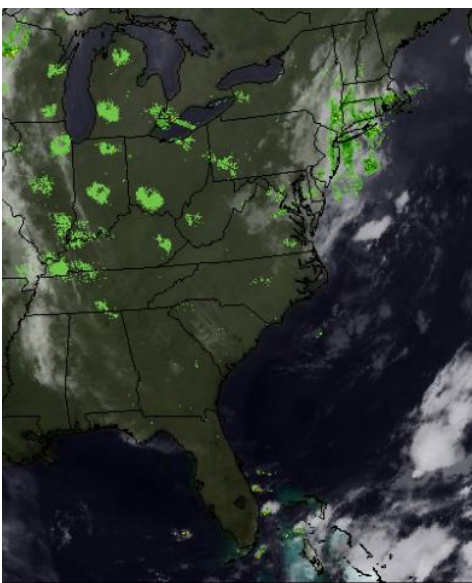
Plymouth State Weather Center

10:00 Z



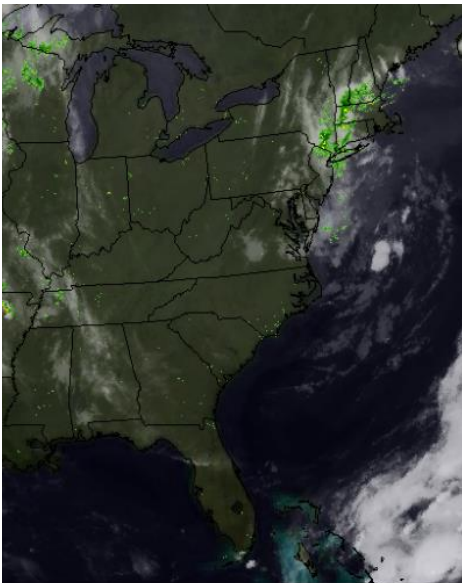
Plymouth State Weather Center

11:00 Z



Plymouth State Weather Center

12:00 Z



Plymouth State Weather Center

Present/Update Cloud Cover Condition and Precipitation System moving towards E/NE driven by prevailing synoptic westerly

GEOstationary Cloud Algorithm Test-bed (GEOCAT)

<http://cimss.ssec.wisc.edu/geocat/>

Cloud type

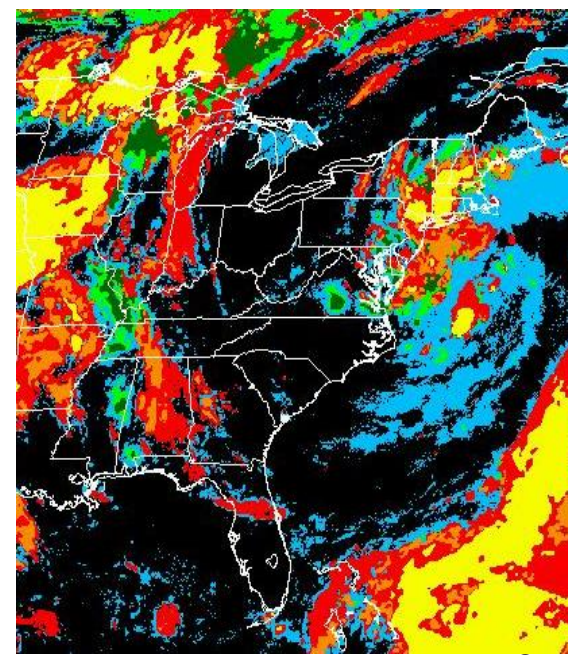
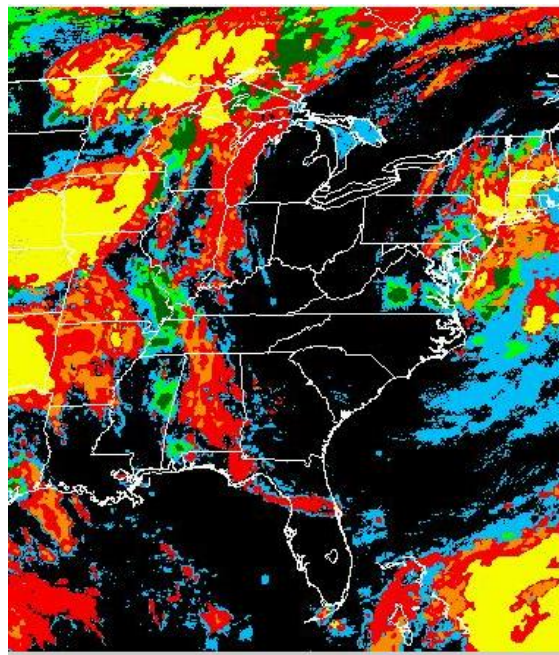
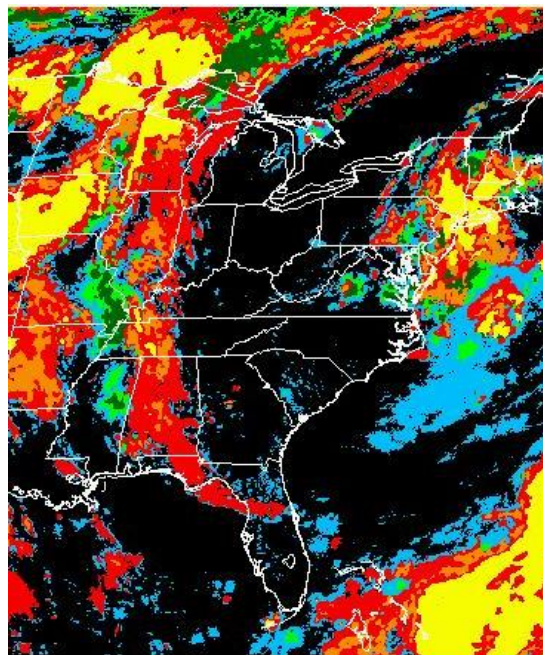


10:00 Z

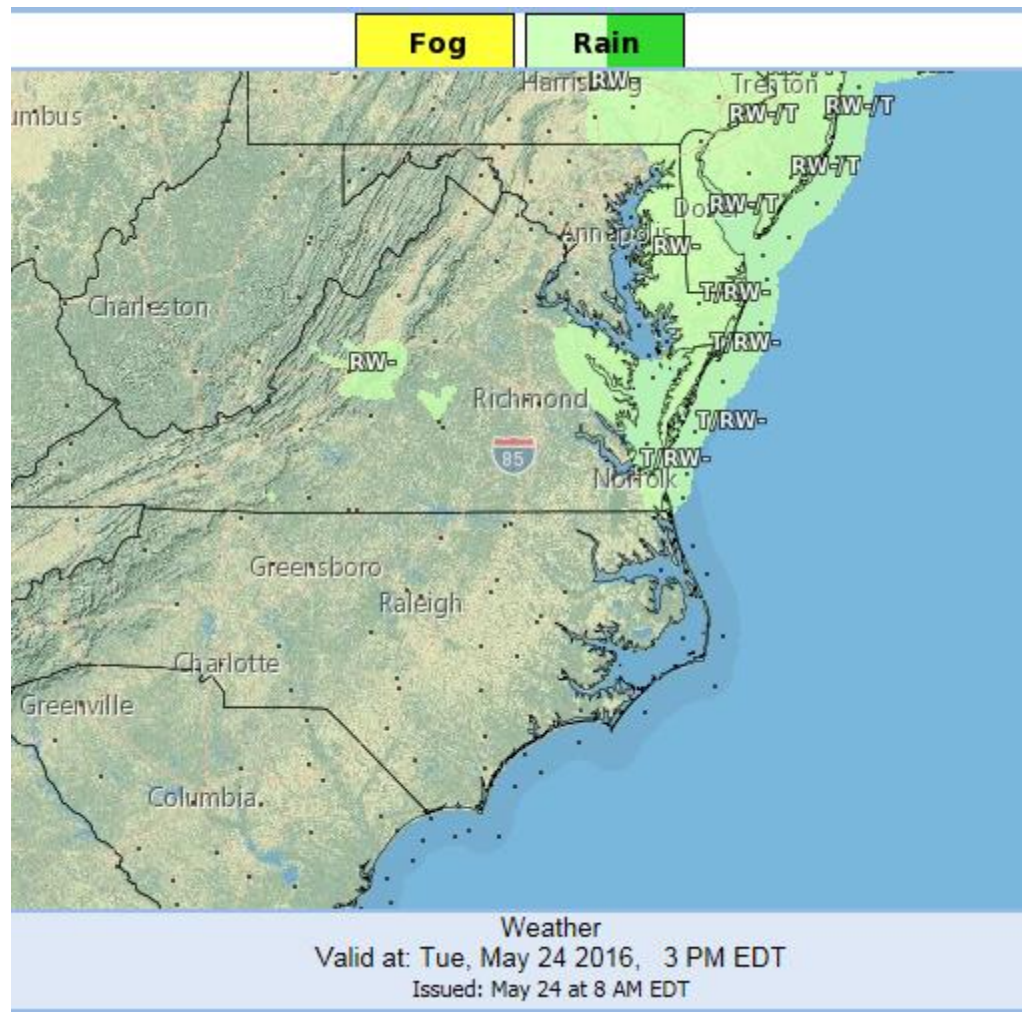
**Low Pressure Departing!**

11:00 Z

12:00 Z

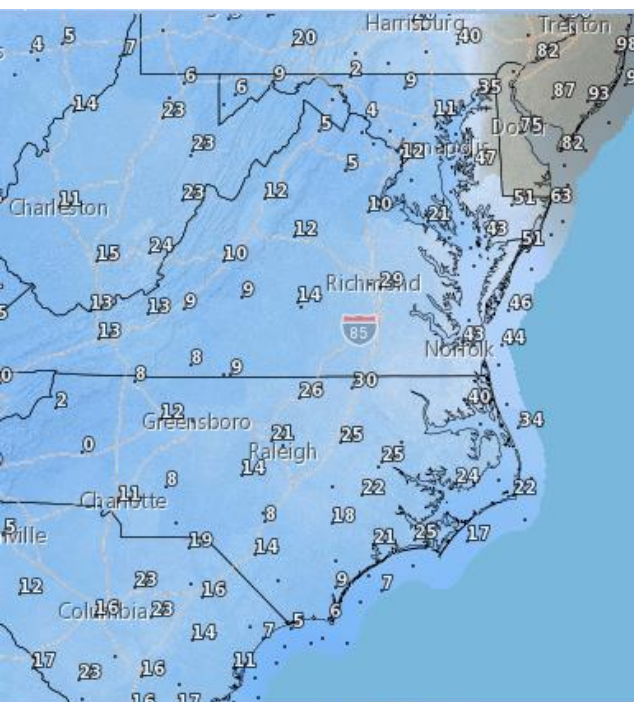
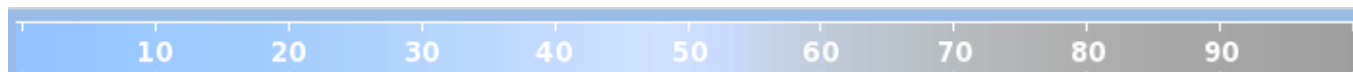




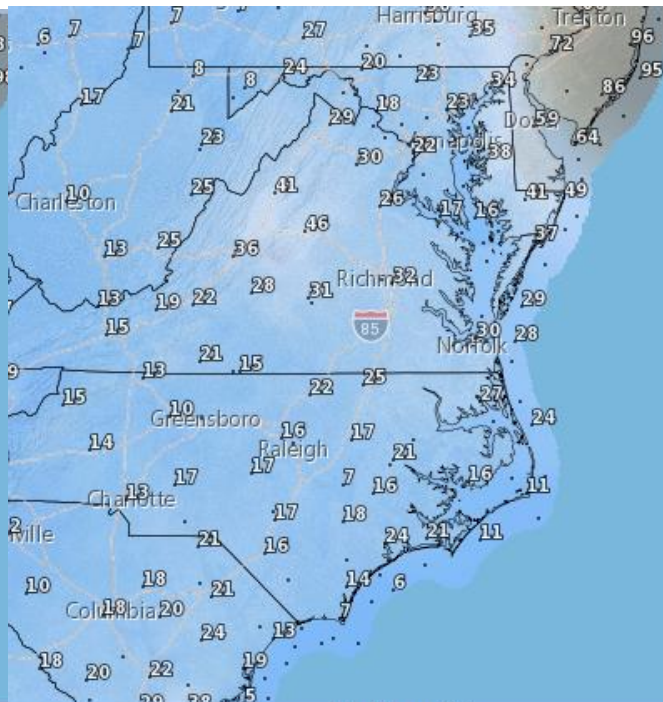


Ocean Flight: Remains cloudy, clearing out later in the afternoon while land flight ~30% cloud cover entire day

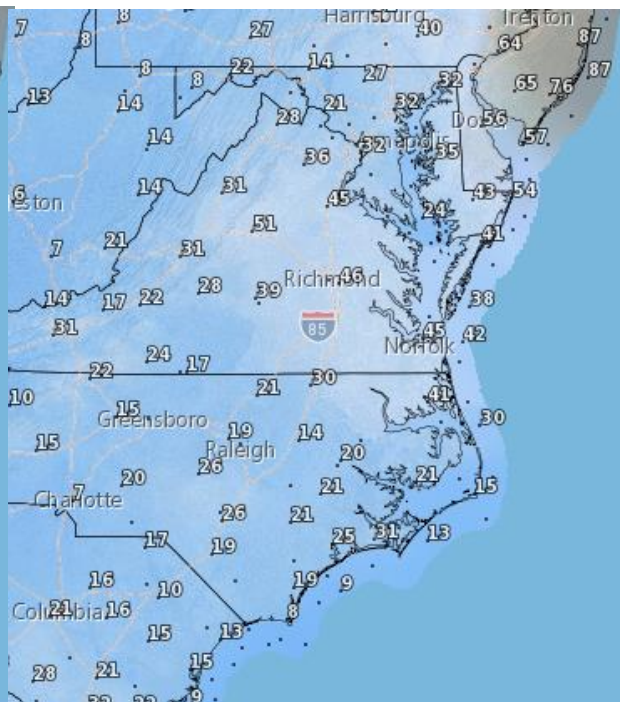
## Cloud Cover Today



Sky Cover (%)  
Valid at: Tue, May 24 2016, 11 AM EDT  
Issued: May 24 at 6 AM EDT



Sky Cover (%)  
Valid at: Tue, May 24 2016, 2 PM EDT  
Issued: May 24 at 6 AM EDT



Sky Cover (%)  
Valid at: Tue, May 24 2016, 5 PM EDT  
Issued: May 24 at 6 AM EDT

VALID: 11AM EST

2PM EST

5PM EST 25



# Cloud Cover Tomorrow

10

20

30

40

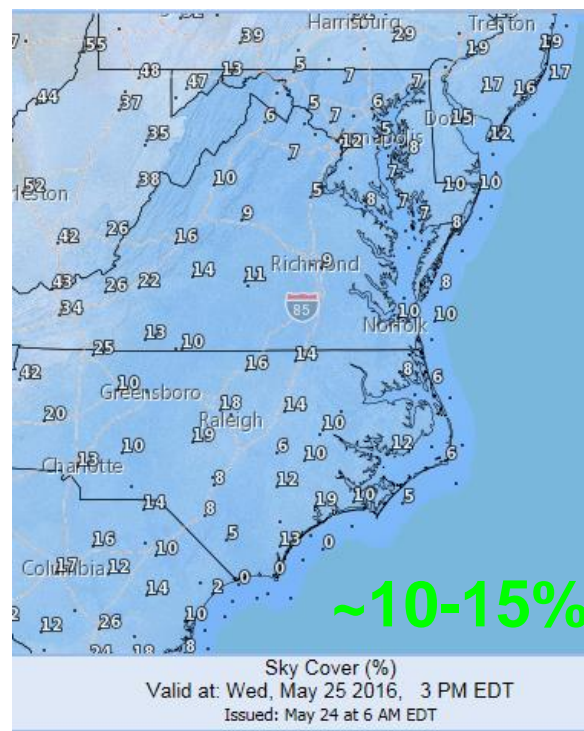
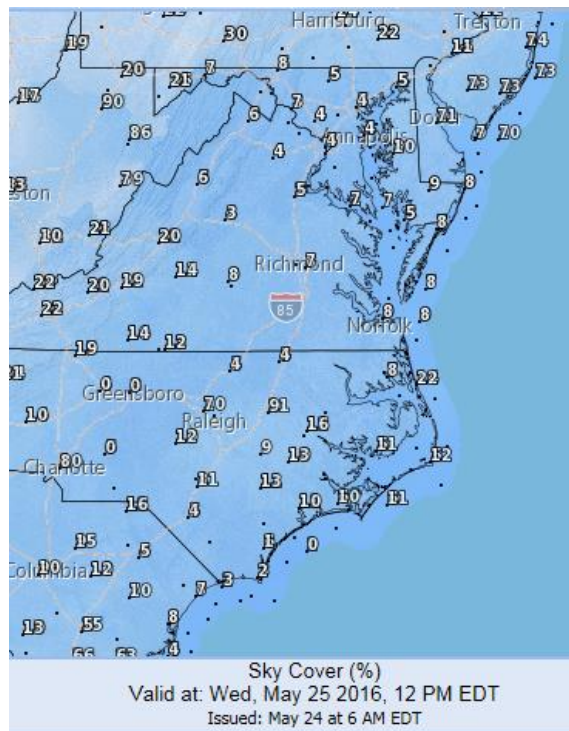
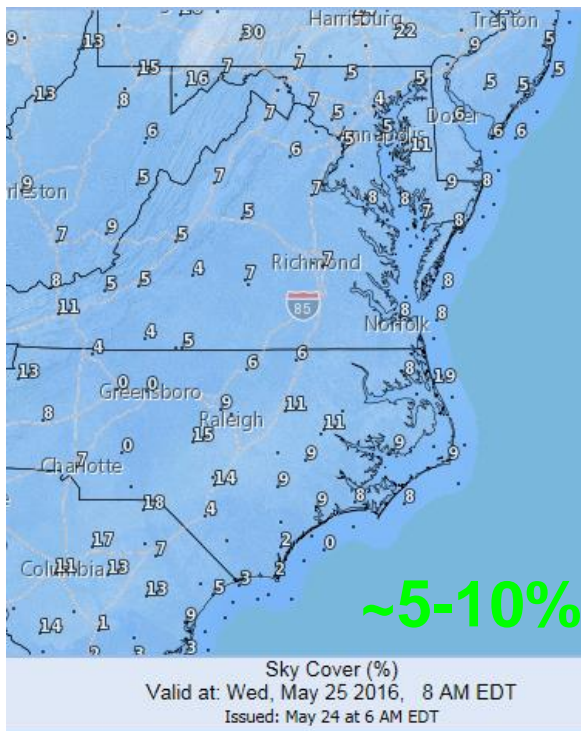
50

60

70

80

90



VALID: 8AM EST

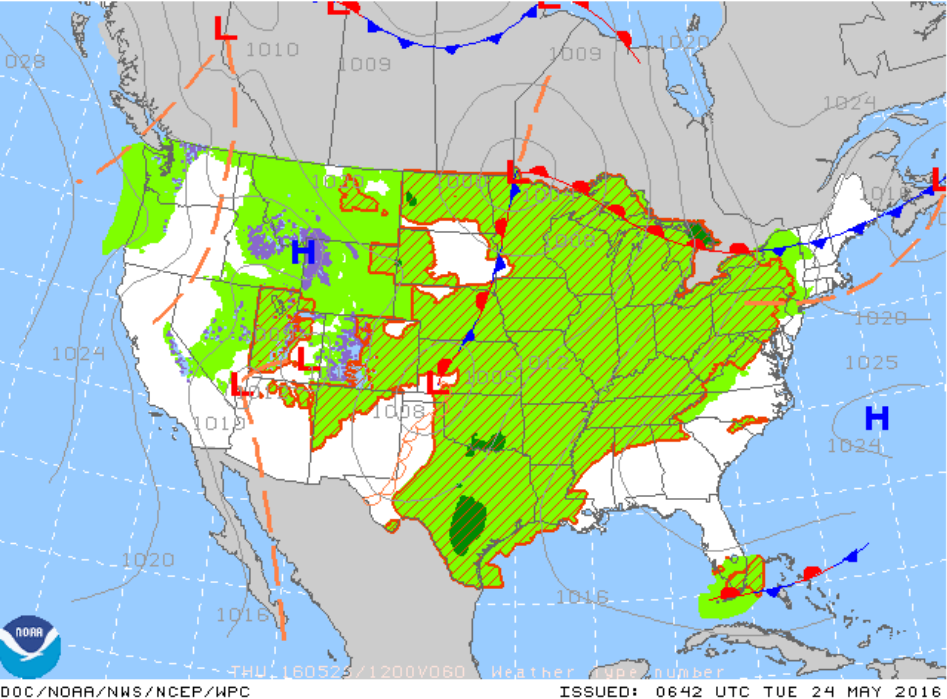
12PM EST

3PM EST

# Long Range Outlook (THURSDAY-FRIDAY)

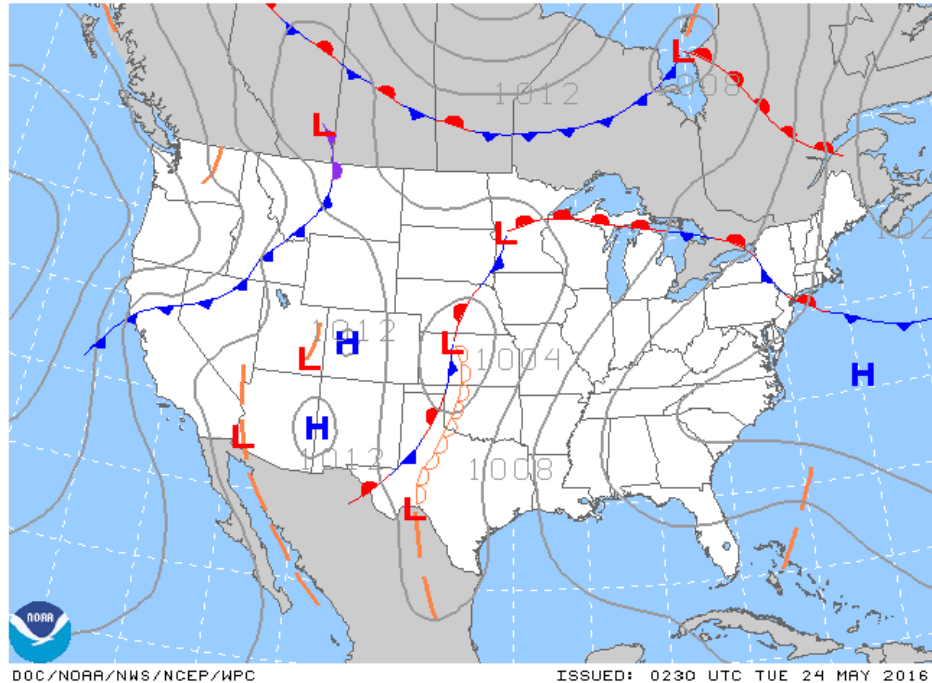


60-HR FCST OF FRONTS/PRESSURE AND WEATHER VALID: 1200 UTC THU 26 MAY 2016

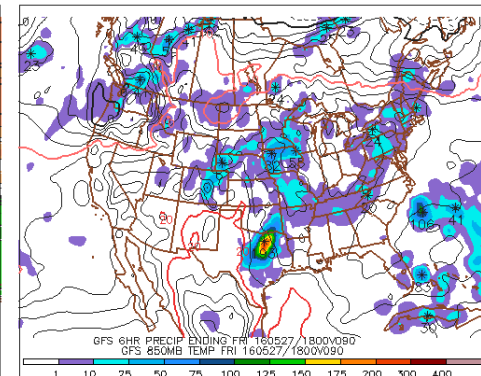
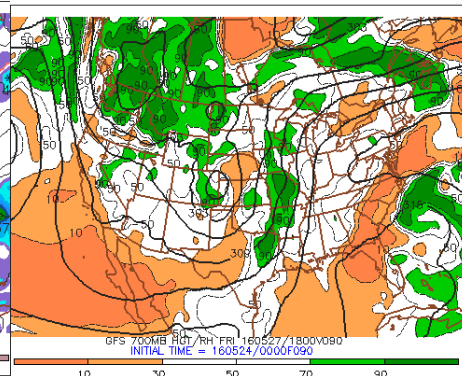
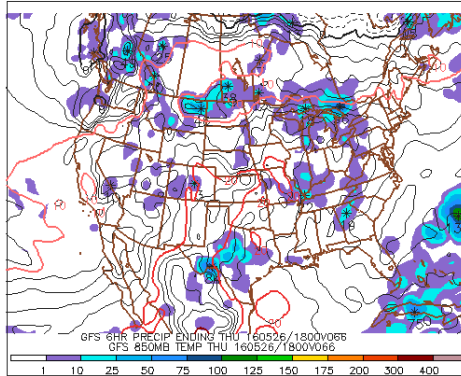
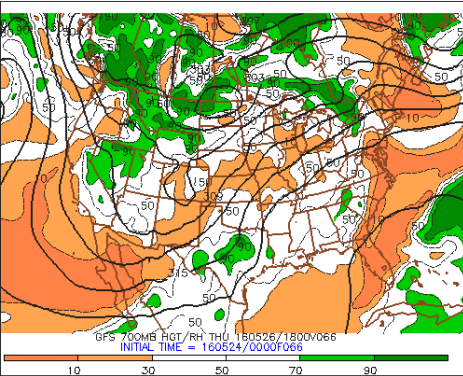
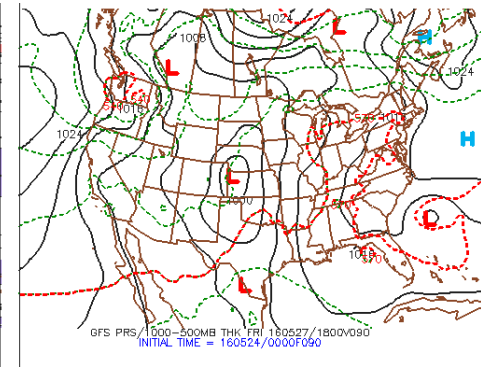
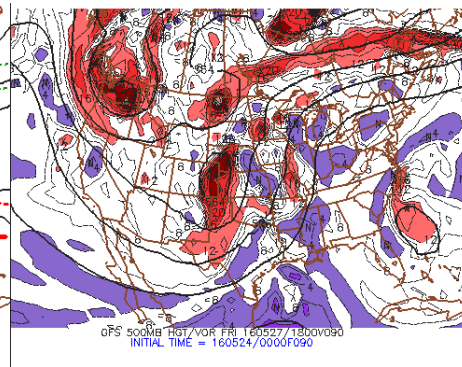
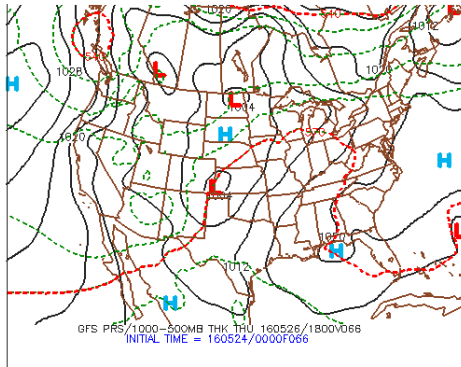
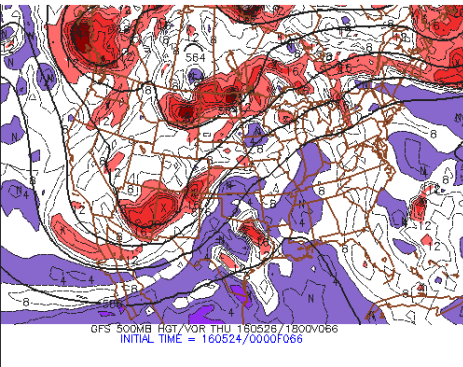


12Z Thursday May 26, 2016

3 DAY FCST OF FRONTS/PRESSURE VALID: 1200 UTC FRI 27 MAY 2016



12Z Friday May 27, 2016



18Z Thursday May 26, 2016

18Z Friday May 27, 2016



# Cloud Cover Thursday

10

20

30

40

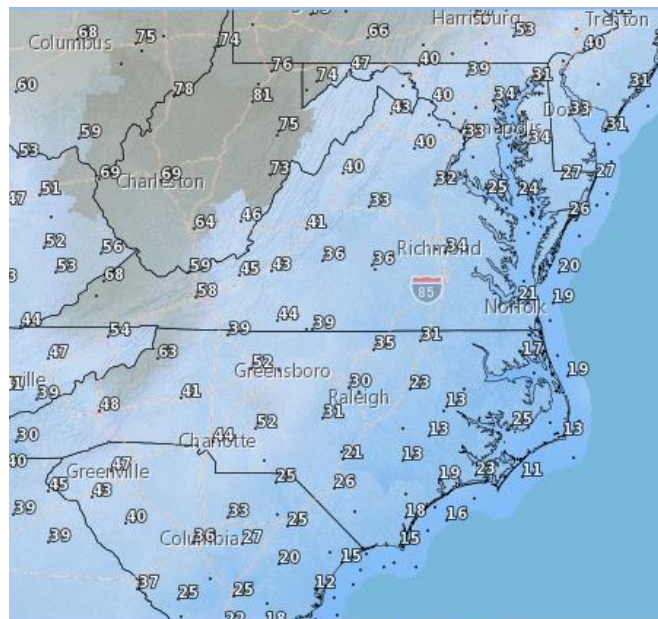
50

60

70

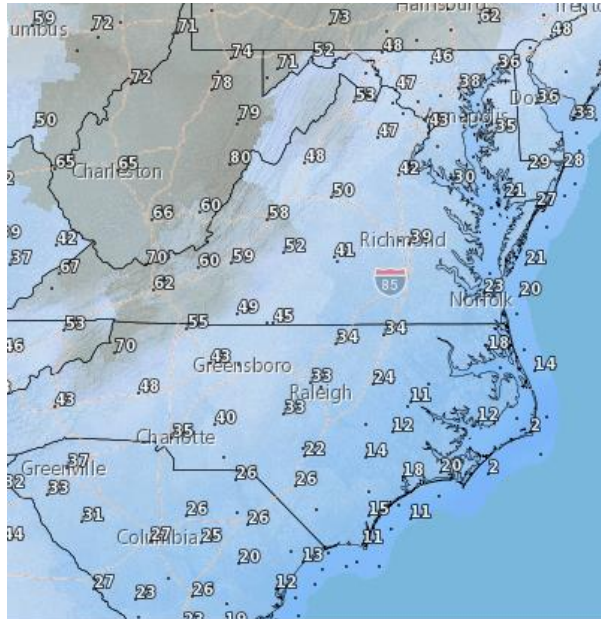
80

90



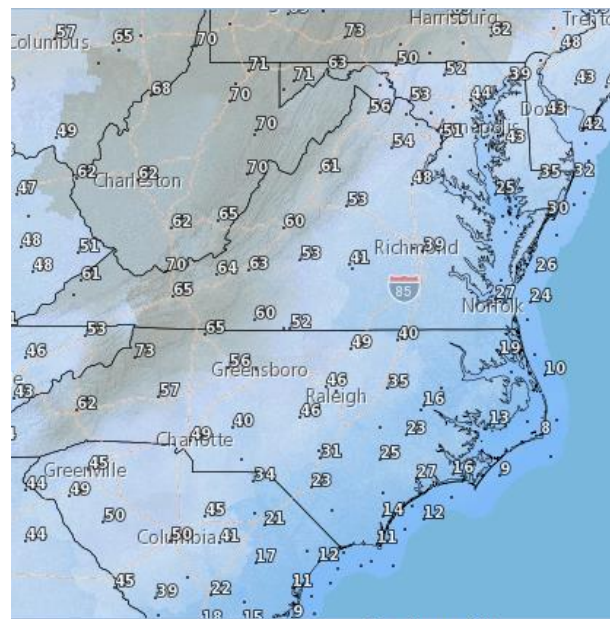
Sky Cover (%)  
Valid at: Thu, May 26 2016, 11 AM EDT  
Issued: May 24 at 6 AM EDT

11AM EST



Sky Cover (%)  
Valid at: Thu, May 26 2016, 2 PM EDT  
Issued: May 24 at 6 AM EDT

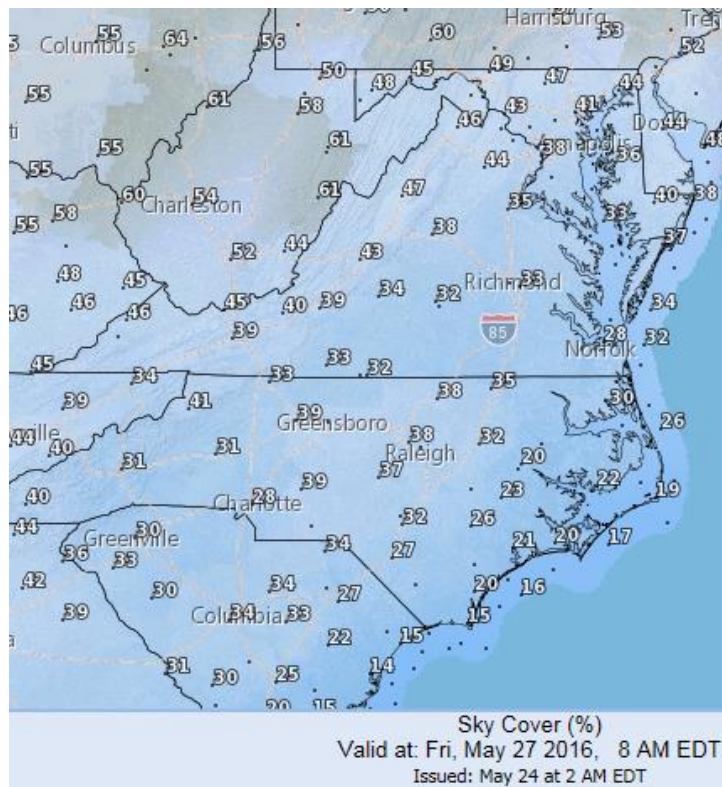
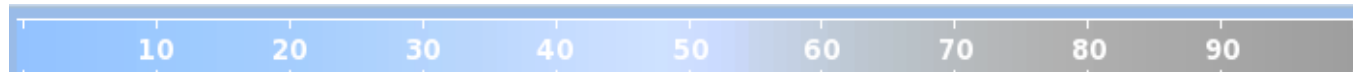
2 PM EST



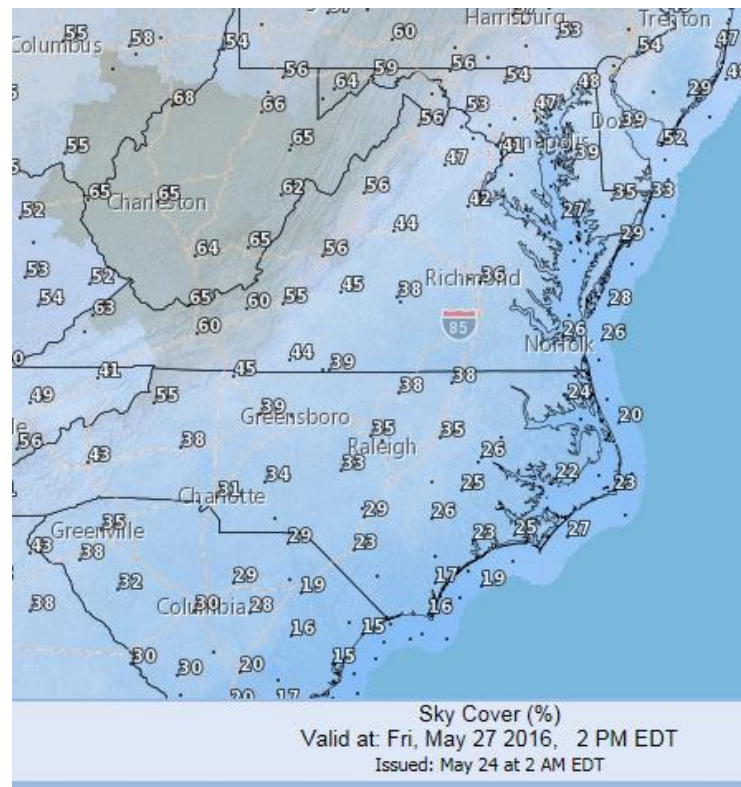
Sky Cover (%)  
Valid at: Thu, May 26 2016, 5 PM EDT  
Issued: May 24 at 6 AM EDT

5PM EST

## Friday Cloud Cover



8 AM EST



2 PM EST



# Long Range Synopsis

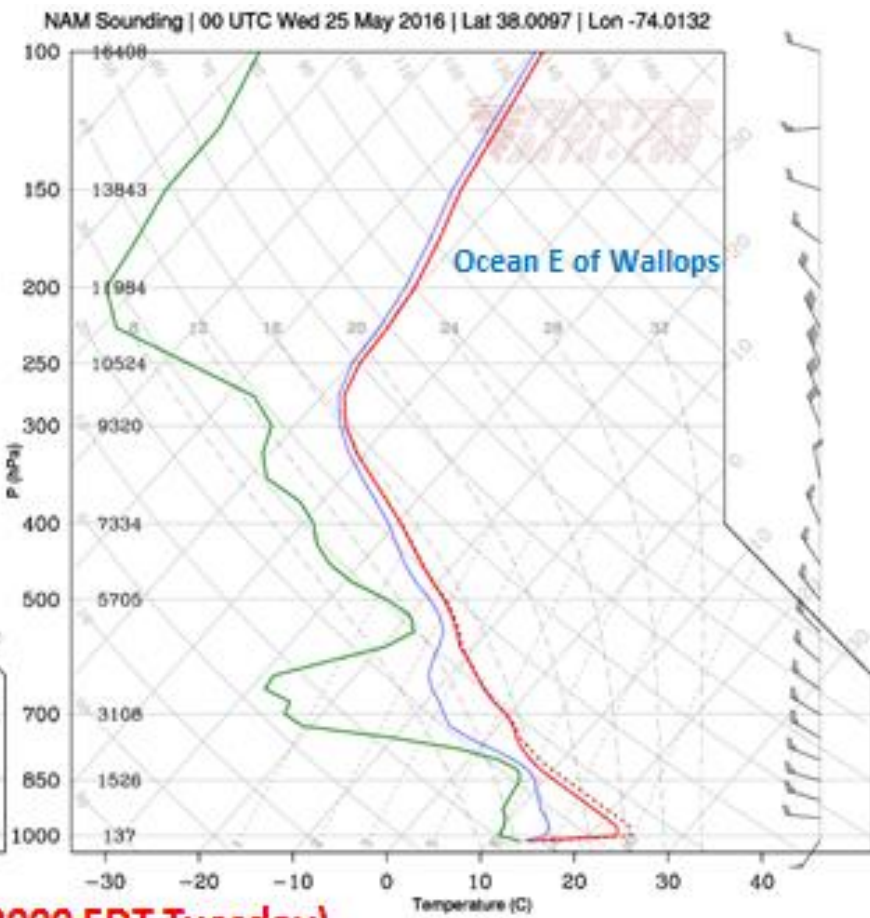
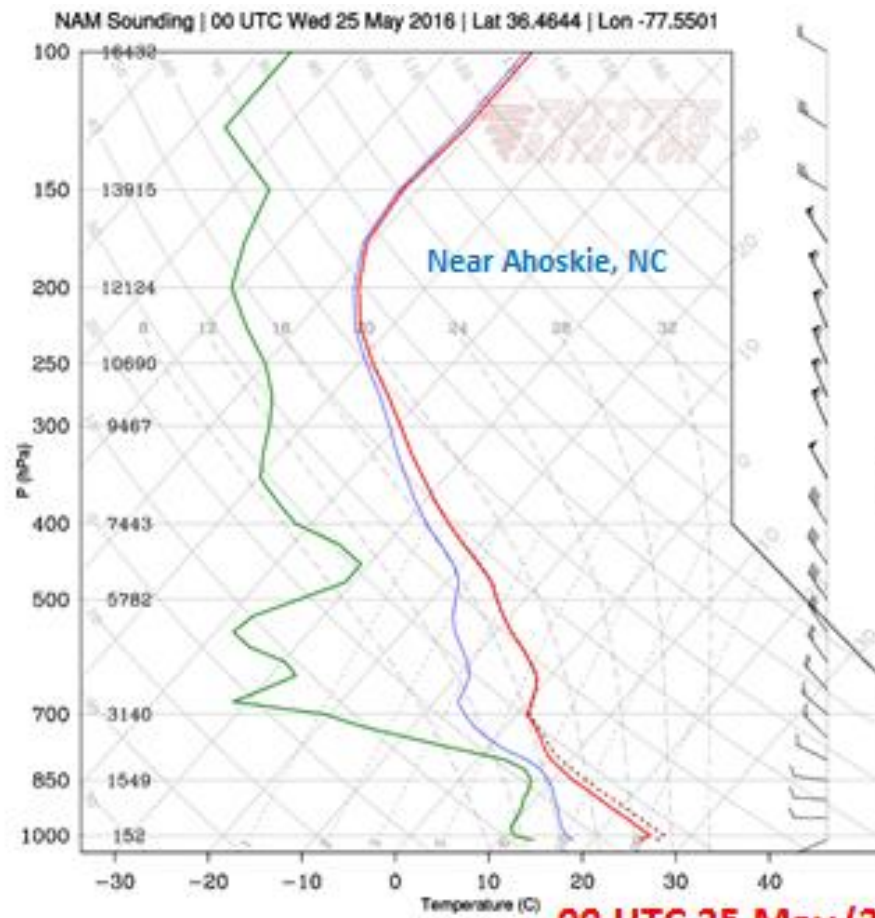
THURSDAY: Clouds increasing as the day progresses, land flight cloud cover increasing from ~30% to ~40%. However ocean flight looks alright with cloud cover around 25% for the entire day.

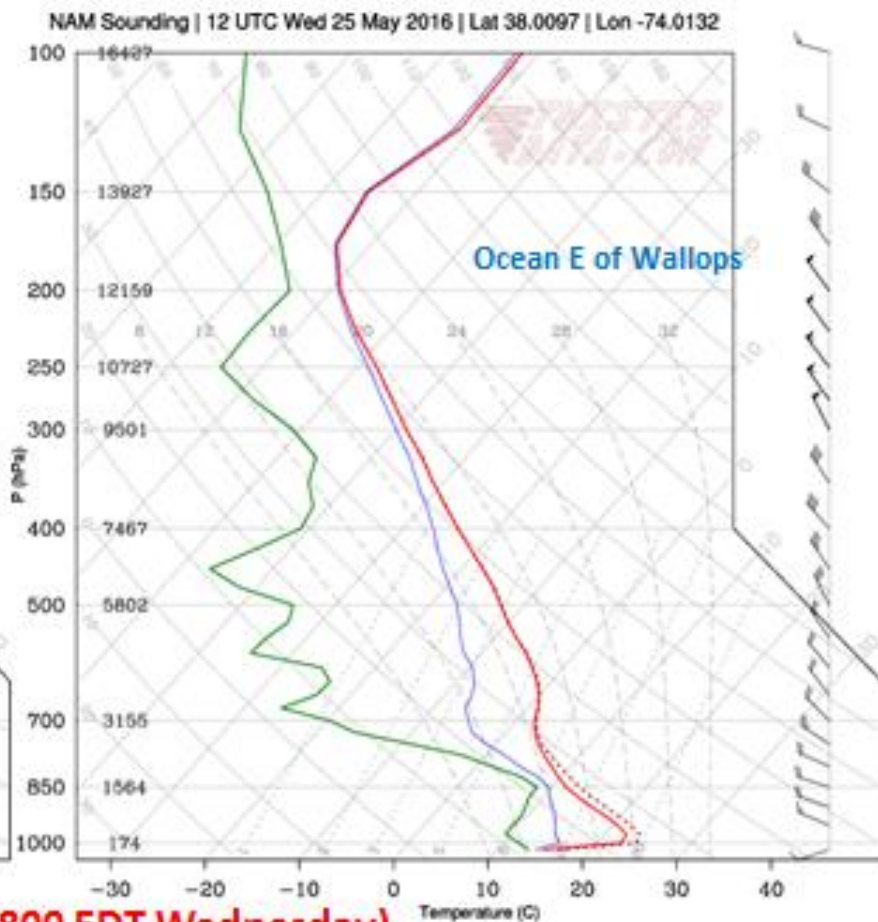
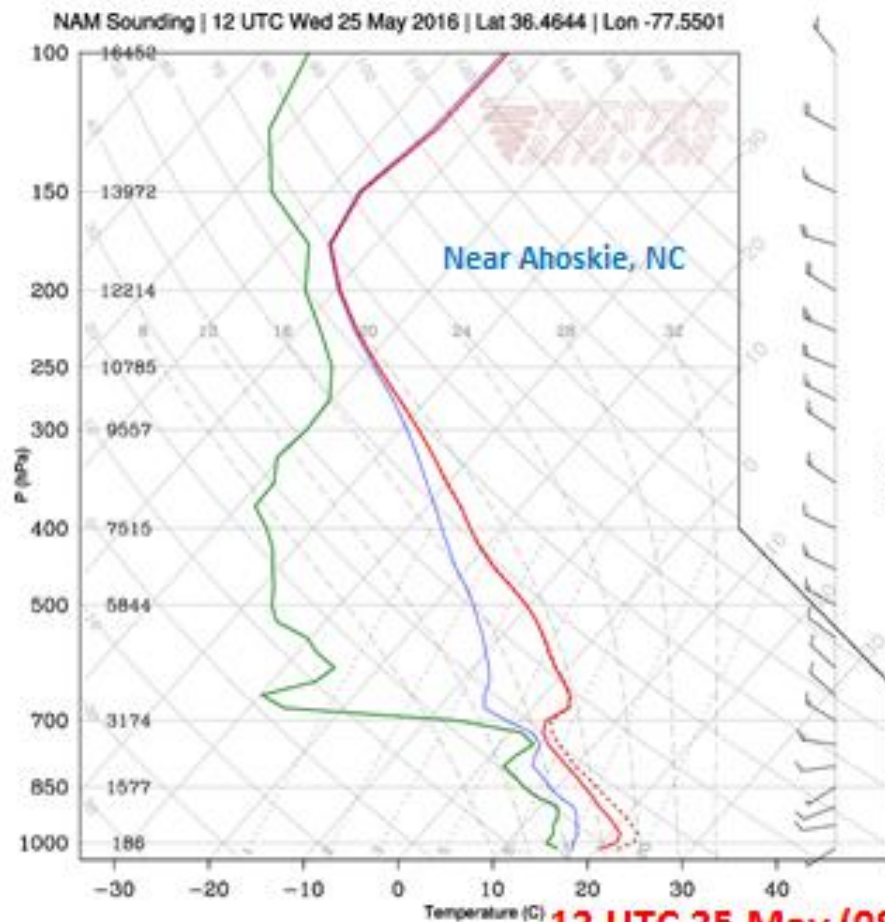
FRIDAY: Cloud cover ~35% for both land and ocean flights for the entire day.

# Additional Slides

NAM forecast soundings (those to follow from Tue morning 12 UTC NAM model cycle) for locations near Ahoskie, NC, in ocean due east of Wallops Island, and in ocean due east of Hampton Roads

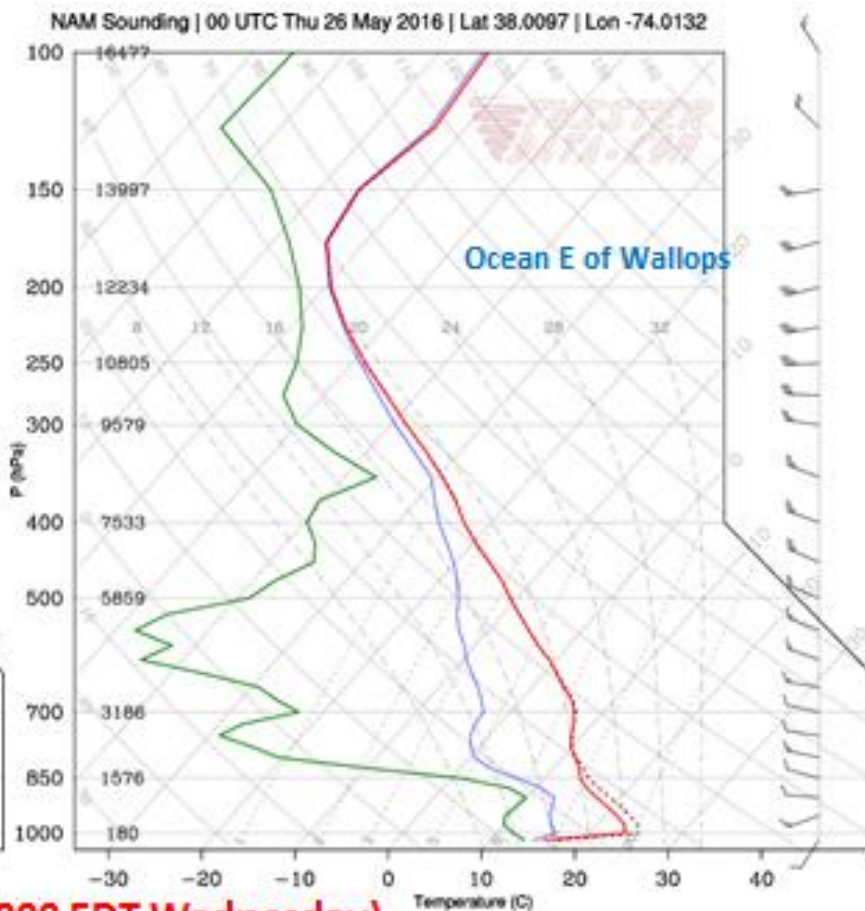
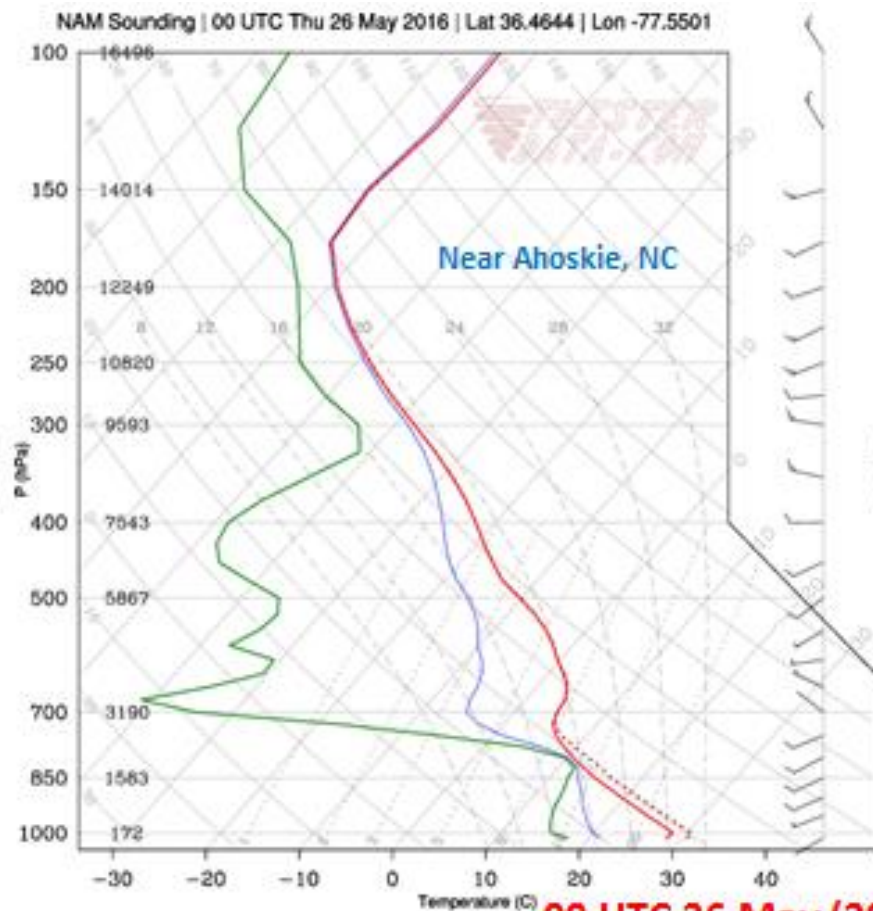




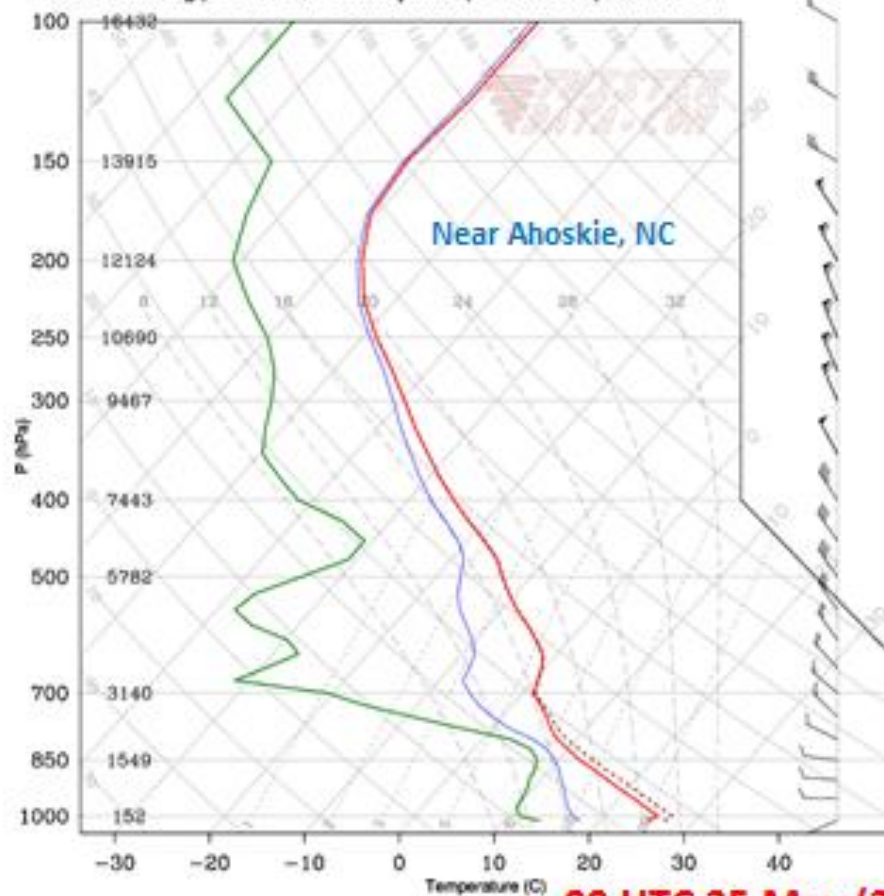


**12 UTC 25 May (0800 EDT Wednesday)**  
**forecast from 12 UTC 24 May NAM**

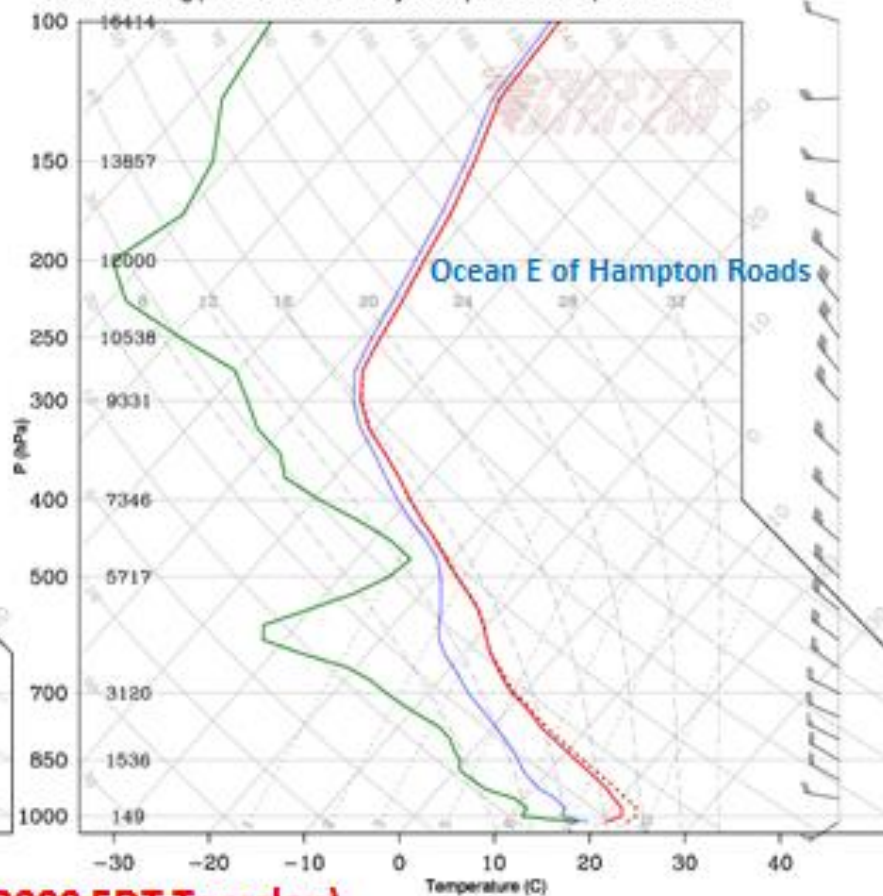




NAM Sounding | 00 UTC Wed 25 May 2016 | Lat 36.4644 | Lon -77.5501



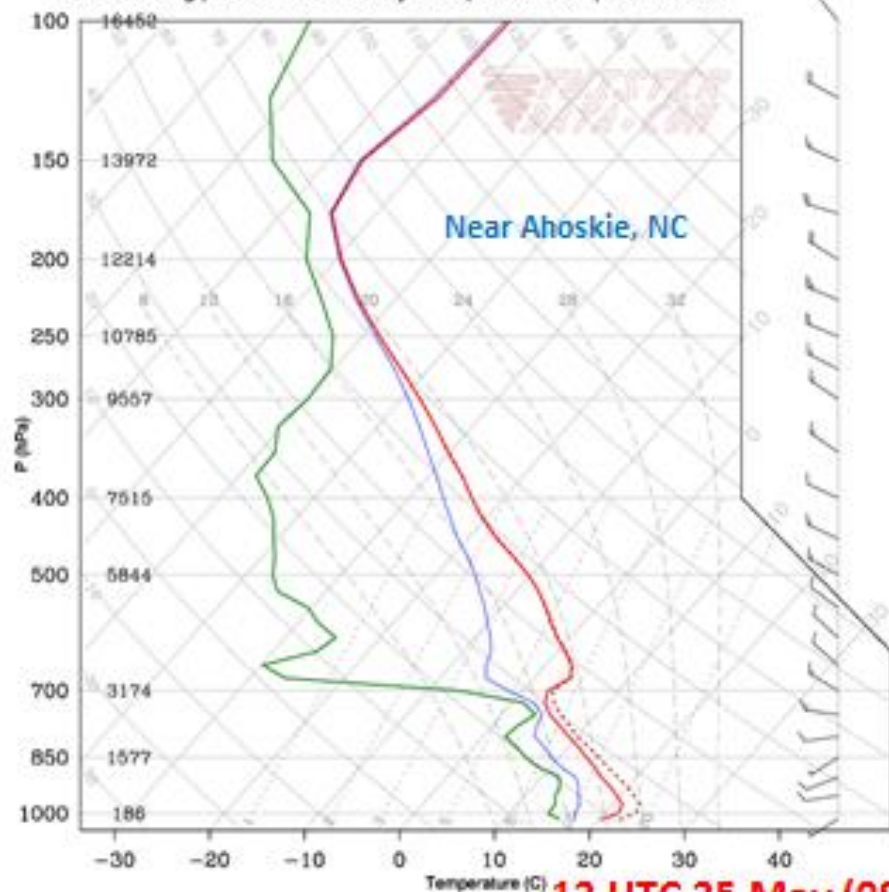
NAM Sounding | 00 UTC Wed 25 May 2016 | Lat 37.0259 | Lon -73.9342



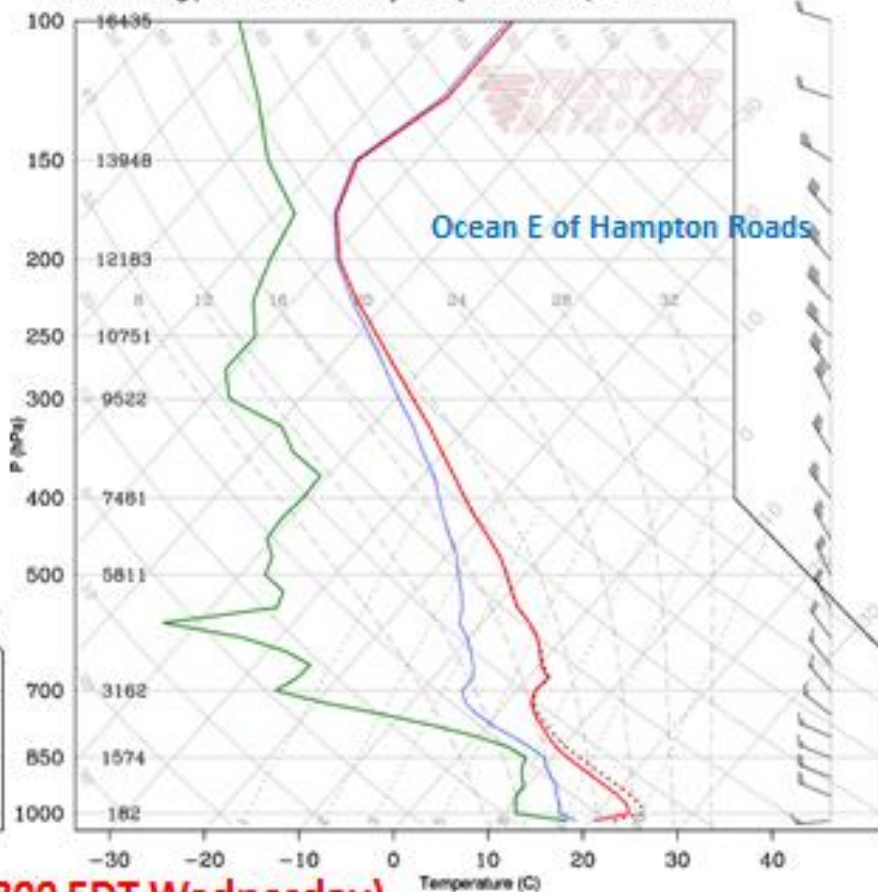
**00 UTC 25 May (2000 EDT Tuesday)  
forecast from 12 UTC 24 May NAM**



NAM Sounding | 12 UTC Wed 25 May 2016 | Lat 38.4644 | Lon -77.5501

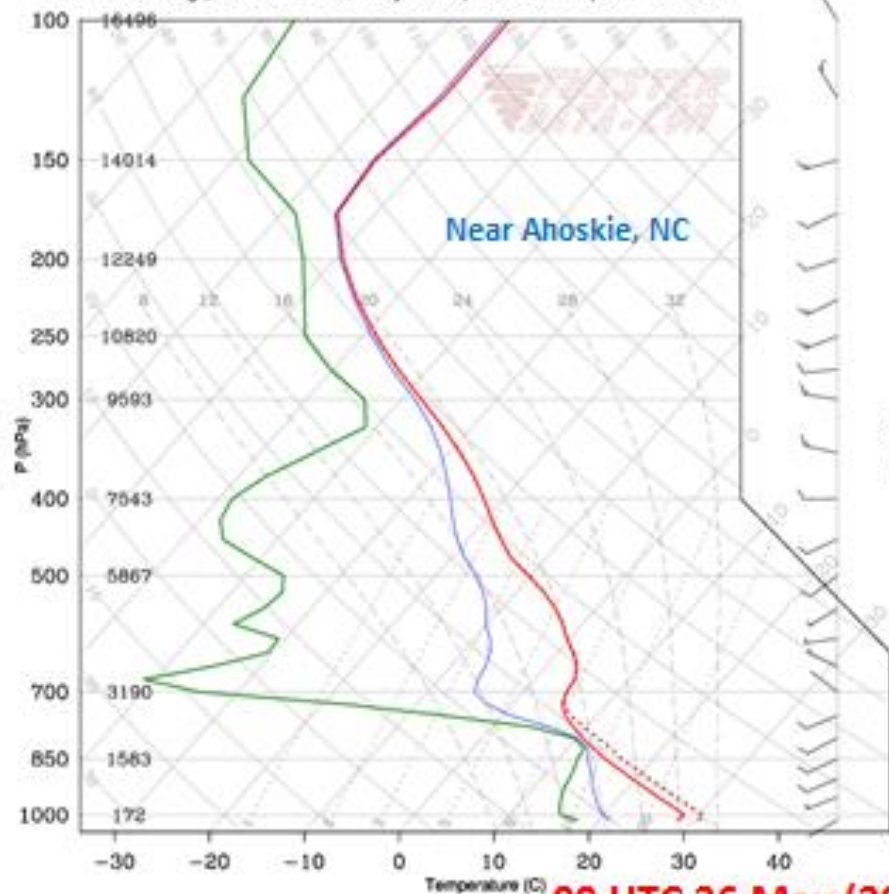


NAM Sounding | 12 UTC Wed 25 May 2016 | Lat 37.0259 | Lon -73.9342

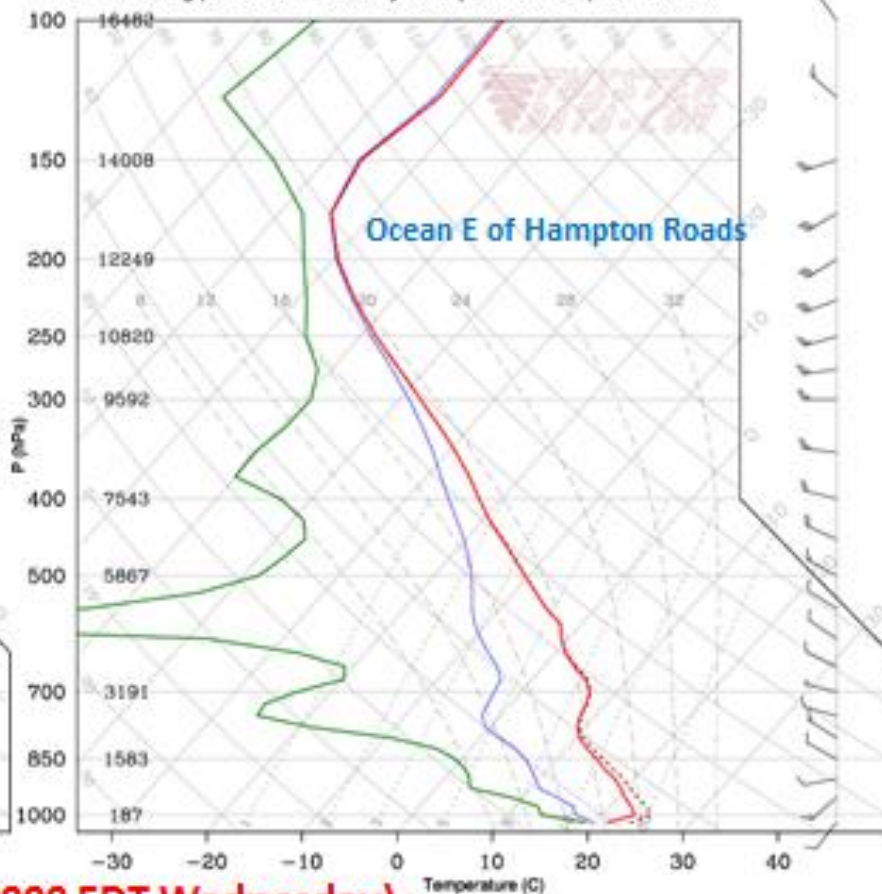


**12 UTC 25 May (0800 EDT Wednesday)  
forecast from 12 UTC 24 May NAM**

NAM Sounding | 00 UTC Thu 26 May 2016 | Lat 36.4644 | Lon -77.5501

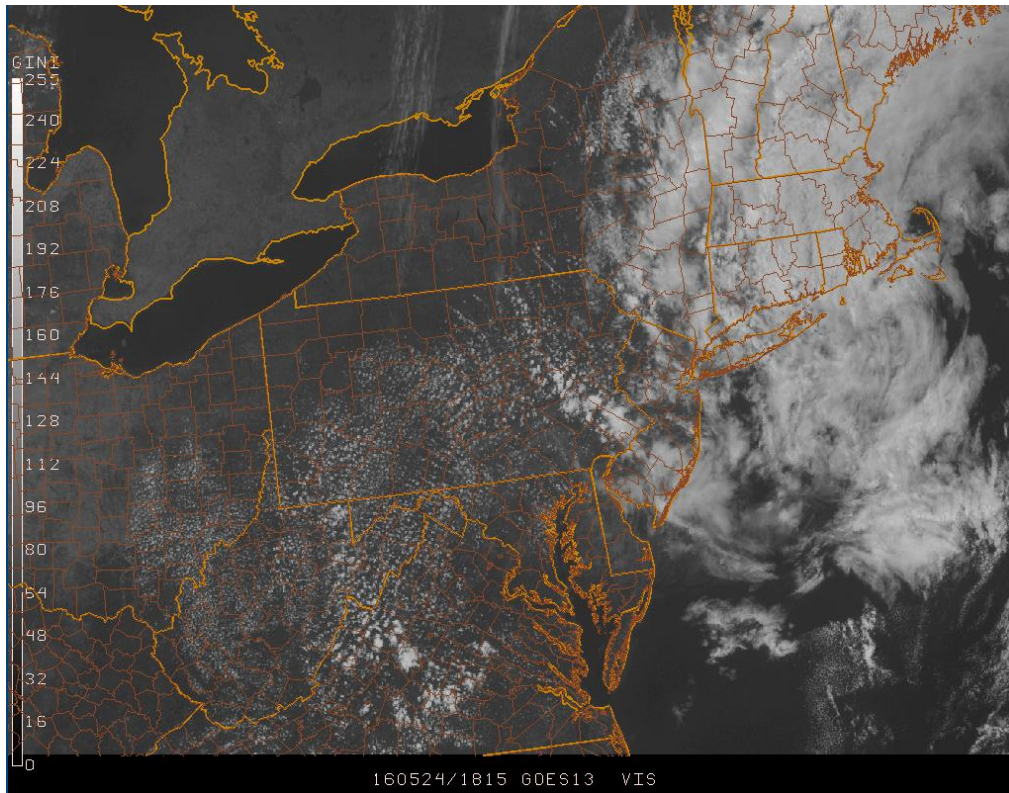


NAM Sounding | 00 UTC Thu 26 May 2016 | Lat 37.0259 | Lon -73.9342



**00 UTC 26 May (2000 EDT Wednesday)  
forecast from 12 UTC 24 May NAM**





VERIFICATION: 1815Z

\*\* NOTE CONVECTION OVER SOUTHERN VA

[http://mp1.met.psu.edu/~fxg1/SAT\\_SE/recentvis.html](http://mp1.met.psu.edu/~fxg1/SAT_SE/recentvis.html)

